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ABSTRACT

The document provides the final report of Project INSTEP (Inservice Training Programs), a pilot project to develop, implement, and evaluate an innovative inservice training program for public school teachers of the behaviorally disordered. An introductory chapter reviews program objectives and rationale. A second chapter outlines components of effective inservice training, including cooperative planning with teachers, accessibility of multiple resources, and reinforcement for professional development. Chapter III discusses the development of performance-based programs, application of computer technology to special education personnel development, and application of instructional development technology as they relate to development of the model. Reported in Chapter IV is data on a planning workshop conducted with 12 teachers to determine what behaviors were typical problem behaviors of emotionally disturbed children, what priorities teachers placed on the modification of specific behaviors, and what skills the teachers deemed as most critical for effective interaction with emotionally disturbed students. Among conclusions outlined in a final chapter is that field-based training is enhanced through processes which allow teacher definition of skill needs. Among appendixes are a master list of problem behaviors and sociobehavioral skills, a chart of goals and objectives for emotionally disturbed students, and the Socio-Behavioral Interaction System Observer's reference manual. (SBH)

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INTENSIVE INSERVICE TRAINING PROGRAM FOR TEACHERS OF THE SERIOUSLY BEHAVIORALLY DISORDERED

(PROJECT INSTEP)

Albert H. Fink
Keith Brownsmith

August, 1977

Final Report 52.1

Center for Innovation in Teaching the Handicapped

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Project INSTEP

Final Report

Preface

Project INSTEP (Inservice Training Programs) is an outgrowth of conceptual and developmental activities which occurred at the Center for Innovation in Teaching the Handicapped during the period of October, 1974, through June, 1976. These activities, spearheaded by Drs. Albert Fink and Keith Brownsmith, the co-principal investigators of the project, concentrated upon the generation of an alternative response to traditional inservice training of teachers of the behaviorally disordered. The conclusion was reached that an inservice training model could be defined and evaluated which would capitalize upon current developments in computer technology and instructional technology as applied to teacher education. The model which emerged and which served as the basis for Project INSTEP fused methodological advances with conceptualizations drawn from performance-based training for teachers and students. The integration of these developments into a unified inservice training model provided multiple strategies for pupil intervention, interprofessional communication and consultation, thereby extending and evaluating the concept of inservice education, as well as providing a new perspective for manpower development in the behavior disorders.

The model also provided an opportunity to consider contributions to the education of the behaviorally disordered in a number of other areas. The development of a systematic method for improving the teaching of the behaviorally disordered _in situ_ was one such outcome. Through evaluation of the components in the inservice training model, refinements could be made which would allow for exportability of the model to other educational environments. In addition, a significant increase could be expected in the knowledge of critical relationships between teacher and student patterns of behavior in educational environments. Further, information on changes in teacher behavior patterns resulting from the various interventions could provide readily usable data on the relative effectiveness of the various aspects of the training program. Training packages could be field-tested as part of the training activities and could thus make possible a decrease in the typical lag between activities in research and development and public school adaption. Finally, cost and feasibility issues contained in combining computer systems, instructional systems technology and competency-based programs into one training model could be considered.

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CHAPTER I

Introduction

The pilot project which is described in this report had as its major objective the development, implementation and evaluation of an innovative inservice training program for public school teachers of the behaviorally disordered. This objective was established on the basis of an assessment of trends in teacher education that have suggested (a) the value of considering alternatives to pre-service training patterns and typical inservice, or field-based delivery systems; (b) the demonstrated need for enhancement of skills of teachers *in situ*; (c) the educational needs of behaviorally disordered students; and (d) the need for technological and conceptual developments that warrant incorporation of instructional systems technology, instructional development and performance-based educational components into teacher training in special education.

Objectives for Project INSTEP

Major Objective

The development, implementation, and evaluation of an innovative inservice training program for personnel educating behaviorally disordered (BD) students.

Subobjectives

1. To develop an innovative inservice training program which combines advances in computer technology, instructional development technology, and performance-based education for teachers and behaviorally disordered students.
2. To provide inservice training to a core of personnel in different educational milieus.
3. To evaluate the program's effectiveness in modifying the behavior of teachers and other personnel involved in these differentiated educational settings.
4. To identify the critical, recurring problems facing teachers of disordered students in order to provide a basis for development of components for flexible inservice training.
5. To develop effective aspects of the inservice training package into exportable multimedia packages.
6. To field test and disseminate the intensive inservice training program for BD students.

Rationale

Large numbers of children in the school-aged population are considered behaviorally disordered and in need of some form of school-based intervention

(Fink, 1972; Hewett & Blake, 1973; Joint Commission on Mental Health of Children, 1970; Morse, 1971). Specific incidence figures vary widely because of variability in screening, identification, and definition. Rhodes (1968), for example, cites a 1967 study by Glidewell which estimated that some 30% of elementary school children show problems of maladjustment. Glavin and Quay (1969) report findings which show incidence rates for emotional disturbance ranging from 4.2% to 22%. Studies by the Joint Commission on Mental Health of Children (1970) suggest that 10% to 12% of the school-aged population need specific interventions in the social and emotional spheres. No matter how one delineates the issue, serious behavior disorders continue to be a major source of concern for the school, creating a major demand for supportive and specialized services (Bazelon, 1970; Morse, 1971; Rubin & Balow, 1971; Silberman, 1970; Toffler, 1970).

A reflection of the national problem is found within the state of Indiana, where the State Department of Public Instruction, in conjunction with local education agencies, is striving to meet vastly increased demands for services to the behaviorally disordered. Of 1,100,000 school-aged children in the state (Appendix B), 1.6% (18,000) are considered emotionally disturbed. Of these, only 3% were receiving services during 1972-3.

Historically, threats to the homeostasis of the schools have been defined under the hegemony of other community agents (Fink, 1972). This "sleight of psychological hand," by which school problems become non-school problems (the exaggeration is not too great), has not fulfilled general expectations, however, for the schools have continued to witness large numbers of problem behaviors (Cowen, Gardner & Zax, 1967). Pressures upon teachers to deal with behavior disorders in their classroom have reappeared -- if they had ever truly disappeared. One source of that pressure was the self-evident inadequacy of solutions based upon "outside referral." Another important input came from educational and psychological theory, which suggested that, aside from practical considerations, solutions within an educational context had theoretical and conceptual validity (Bower, 1967; Fink, 1972; Hewett & Blake, 1973; Reynolds, 1971).

Reinforcement for this concept has come from recent litigation which has mandated that schools are responsible for presenting each child with the right to an education (P.A.R.C. vs Commonwealth of Pennsylvania and Education Department of Pennsylvania, 1971). The right-to-education litigation has resulted in mandates which state that the education received by each child must meet his or her individual needs. Schools thus face a major responsibility for the education of children with behavioral difficulties, and these children constitute a sizeable proportion of the school-age population.

In-school solutions to these problems have typically required the selection of specially trained teachers who, working in varying degrees with professionals, have brought interventions to behaviorally disordered children (Fink, 1973). Traditional psychological theories have served as schemes for characterizing the pattern and type of intervention applied. As a rule, this has meant an interventionist stance, couched in terms of one of the major belief systems: psychoanalytic, psychodynamic, psychoeducational, behavioral, or humanistic (Fink & Glass, 1973). Furthermore, these systems have been classified within the context of a range of possible service options: e.g., special self-contained classrooms, resource room, itinerant teachers, or integration into the regular classroom. Recent theory suggests a need for greater emphasis upon interactive and integrative solutions to the problems found by school personnel (Morse, 1971; Rubin & Balow, 1971). Teachers, in particular, require training in techniques which integrate effectively with school-based child support services (Fink & Glass, 1973; Reynolds, 1971). Such an interactive-integrative framework would view the development of social and personal competencies as major goals for the behaviorally disordered. This development would take place within a framework of interactions among teachers, students, schools, family, and community environments.

The role of all teachers in the implementaiton of such solutions will be significant. It will require greater sophistication and efficiency in classroom observation skills, professional communication, methods and strategies of behavior management, evaluation techniques, parent counseling, and group dynamics. The professional preparation of teachers to deal with these complex, emergent tasks is vital. In the past, the brunt of the training load has been borne by universities and colleges and has been carried out within the context of traditional academic programs (Tompkins & Saettler, 1970). These programs have provided an interplay between theory and practice, in varying degrees, with an increasing emphasis recently upon practice (Fink, Glass & Guskin, 1975).

Other recent trends also suggest a definite movement toward, and emphasis upon, training which focuses on teacher behavior in situ. Reynolds (1974), for instance, notes the reawakening activity and interest in inservice education in teacher training. This increased emphasis can be explained, in part, by the reduced turnover of school personnel during the past several years. There are also indications that education personnel have an increasing desire to upgrade their qualifications and to fit themselves for changing roles in a rapidly changing society (Reynolds, 1974).

The potential role of inservice training in meeting the need for quality services for the emotionally disturbed is highlighted by projections of programming needs within the state of Indiana. Within one year the number of behaviorally disordered served by the schools has almost doubled. Significant increases in demand for programs are projected for the next three- to five-year period. This increase in demand for adequate programs will strain an already meager supply of teachers who are competent to work with the emotionally disturbed, and will create an additional need for the training of teachers in the field (Bliton, 1974).

CHAPTER II

Components of Effective Inservice Training

Typical models of inservice education are not likely to prove successful when applied to meet the training needs of teachers for the behaviorally disordered. A review of the available material on inservice education suggests that the incorporation of certain critical concepts could lead to more effective inservice programming. These are discussed below.

Cooperative Planning with Teachers

If inservice education focuses on the professional educator as a life-long learner, it is clear that teachers must be significantly involved in determining both the content and structure of training. If they are not so involved, they are not likely to willingly commit significant amounts of time and energy to training. The passive/recipient models of learning are not as powerful for motivating participants and increasing learning as those models built upon mutually defined interests and cooperation.

This necessity for cooperation has been emphasized in a variety of studies. Those cited represent a cross section of statements on this issue.

> The project should belong to the participants (the staff) (Community Services in Adult Education, 1957).
>
> Those who work together ought to know each other. The best planning takes the human element into account and does not overlook this vital ingredient in teacher growth (Derthick, 1961).
>
> Only in those school systems where teachers helped to plan the programs did the majority of teachers feel that any improvement in instruction had resulted (Neagley & Evans, 1964).
>
> ...the major conclusion to be reached from the literature is the repeated efforts on the part of many writers to emphasize the need for cooperative planning... (Schankerman, 1969).
>
> Teachers are tired of being done to, of having innovation imposed on, being led or pushed into inservice training. They

> are suspicious and resentful from too many experiences with educational personnel who don't teach, who devise schemes and content with little teacher input that teachers are expected to embrace and apply (Edelfelt, 1972).

Focus on Teacher-Defined Problems

An inservice program which does not focus upon resolving the teacher's problems in providing an effective educational program to students does not have much chance of long-range success. It is not atypical for inservice programs to provide experts who talk about issues which do not directly relate to the teacher's immediate problems. While presentations of this type may be interesting, they are likely to be less than useful to the teacher.

The necessity of directly typing inservice education to teacher-defined problems is a recurring theme in the literature:

> An effective inservice program must be concerned with specific school problems... (Wood, 1951).

> Effective inservice education develops from dealing with problems indigenous to the school where the teaching is involved (Bureau of School Service, 1964).

> Teachers themselves should generate the possible solutions to the problems which they have identified and use the consultant only as a resource person (Kirby, 1973).

> It is our belief that problem solving must be the core process in the development of adequate programs of inservice teacher education (Edmonds, Ogletree, & Wear, 1966).

Focus on Actual Change in Teacher's Behavior

The problem of providing quality education programs to an increasing number of behaviorally disordered students will only be influenced by inservice training if training focuses on actual changes in teacher behavior. The acquisition of knowledge or increased awareness of new developments in the field will accomplish little unless training is not transferred into the classroom.

The need for inservice training which focuses on actual change in teacher activities has long been recognized and is reflected in the following statements:

> The program of inservice education should be designed and executed in such a way that the results can be applied and used by participants... (Derthick, 1961).
>
> Inservice education consists of experiences planned to help individuals and groups on the job to perform better than they would without the experiences (Miel, 1962).
>
> Participants should be able to do something which they could not do before or do something much better than they could before the (inservice) conference (MacIntyre, 1972).
>
> The behavior of the teacher is the keystone of instructional improvement (inservice training) (Edmonds, Ogletree & Wear, 1966).

Focus on Reason for Change

While it is important for inservice training to focus on actual change in classroom practices, this alone will not lead to acceptance or rational application. The professional teacher is not likely to significantly modify practices unless underlying reasons for such modifications are adequately presented. While the relative emphasis upon theory and practice in inservice training has shifted back and forth over the years, a focus on reasons for change has continually been designated as a necessary factor for effective training.

> All educators need to know why as well as how... (Miel, 1962).
>
> Educational change is fundamentally dependent upon change in peoples' attitudes, understandings, skills, and behavior (Edmonds, Ogletree, & Wear, 1966).
>
> If the teacher is informed about the advantages and disadvantages of the various alternatives, he will be better able to choose the most appropriate and effective strategy (Shaw & Shaw, 1972).

Selection of Time and Place of Training to Maximize Teacher Participation and Active Involvement

The best of inservice programs will fall short of its potential if presented at a time when teachers are too exhausted to be interested or when they feel they should be engaged in other significant activities. It is important to consider how far the teacher must travel to reach the place where training is to occur. A successful inservice training program needs to be set up at a place and time convenient to the teacher, rather than the trainer, in order to insure maximum commitment.

> It (inservice training) must be made available in a way which makes it physically possible for the largest number of persons to take part. This means:
>
> (a) That it must be organized within traveling distance...
> (b) The working conditions in the school must leave him with some time and energy to spare to invest as he wishes (Langveld, 1962).

> All too often teachers feel that inservice programs make unnecessary demands upon their time and energy (Manth, 1962).

> School systems are providing more released time during the day for inservice education activities (National Education Association, 1965).

> Days for professional growth and development should be incorporated in the program of inservice education (Schankerman, 1969).

Accessibility of Multiple Resources

The increase of packaged materials for teacher training may be partially related to the need for a variety of available resources for effective inservice training. If long-range inservice training programs are not going to stagnate, multiple resources, both human and material, must be available. This need has been recognized by a variety of individuals involved in inservice training and is supported by assertions such as:

> Multiple and rich resources are available and utilized (in effective inservice education) (Parker, 1957).
>
> Programs...have great merit in allowing for (1) a wide range of personal resources and materials... (Rehage & Denemark, 1957).
>
> Effective inservice education utilizes all available resources both within and without the school system (Bureau of School Service, 1964).

Atmosphere Supportive of Individuals' Ideas and Concerns

To maximize the growth of teachers, inservice education needs to be responsive to the concerns of individual teachers. Recognition and acceptance of differences in opinion and style are integral to training. This requires an atmosphere which is appropriately supportive of the variety of individual ideas and concerns which can be anticipated in the give and take of the everyday school situation. The following statements define the importance of this element:

> Inservice education can best take place in an environment which utilizes the intelligent and creative thought and action of the entire faculty (North Central Association of Secondary Schools and Colleges, 1944).
>
> An atmosphere is created to build respect, support, permissiveness, and creativeness (in effective inservice education programs) (Parker, 1957).
>
> Inservice education programs focus upon helping the individual teacher grow professionally. While the majority of activities involve groups in cooperative experiences, the major emphasis is still on the individual teacher (Bureau of School Services, 1964).
>
> The most effective environment for change (as a result of inservice training) provides freedom to express both feelings and ideas, encourages self-direction and is free of coercion (Flanders, 1962).

Active Participation of Teachers

Inservice education which is structured around the active participation of teachers rather than passive acceptance of content has a greater chance of producing change. Comments such as the following illustrate the importance of this participation:

> For adults, as well as children, most learning and change take place when the person is doing something and not when he is merely sitting and listening (MacIntyre, 1972).
>
> Knowledge and skill are derived from experience which is based on active interaction with learning opportunities (Manth, 1962).
>
> Most of the programs (inservice workshops) are designed to involve teachers as active participants rather than passive recipients of information (Dailey, 1972).

Built-In Feedback

Feedback has repeatedly been empirically demonstrated to improve trainees' acquisition of skills. This feedback may take a variety of forms, but one of the most effective is the feedback of observation data on teacher-pupil interaction in the classroom. The importance of feedback has been stressed in a variety of contexts:

> Unless actual feedback occurs, there is no more educational defense for an inservice program for teachers than for a classroom program which has no influence on the rest of school behavior of children (Manth, 1962).
>
> Perhaps this stage of inservice is the most crucial step in teacher learning, for without evaluating one's tactics in terms of student performance, a teacher cannot determine the effectiveness of his decisions and implementation skills (Shaw & Shaw, 1972).
>
> These observation systems and the instantaneous feedback process (of CATTS) hold great promise for the inservice training of teachers (Heath, 1974).

Reinforcement for Professional Development

Inservice education is usually viewed as one of the important responsibilities of professional education. Without sufficient incentives for participation, however, the activity will not remain a high priority for the teacher. Forms of reinforcement have varied -- college credit, extra pay, and released time have all proven to be valuable inducements. An important component of any long-range inservice program is some form of support and reinforcement for professional development. The importance of this is borne out in the following statements:

> Compensation is given for time contributed by the teachers outside the regular day, week, or year (National Education Association, 1965).
>
> The chief factors that stimulated teachers to participate in inservice education activities were the desire to do a better job, to increase ones salary, and to be on tenure (Mead, 1956).
>
> If a teacher believes that the job of teaching is concerned only with those activities with children, there may be no place in the definition for inservice work (Sternig, 1962).
>
> (Inservice training should provide)...credit for any change in teacher behavior which could increase her teaching effectiveness (Asher, 1967).

This review of the available literature on inservice education suggests that there are a number of important elements in the development of effective inservice programs. These are, in summary:

1. Cooperative planning of the program with teachers.
2. Focus on teacher-defined problems.
3. Focus on actual change in teacher's behavior.
4. Focus on reason for changes.
5. Selection of time and place of training to maximize teacher participation and active involvement.

6. Accessibility of multiple resources.
7. Atmosphere supportive of an individual's ideas and concerns.
8. Active participation of teachers.
9. Built-in feedback.
10. Reinforcement for the professional development.

CHAPTER III

Toward a Model of Inservice Training

In what form can inservice programs be developed to insure that the criticisms suggested by the previous analysis are not repeated? A number of recent developments in teacher education, special education, and instructional and computer technology offer a potential solution to the general problem of providing quality inservice training and meeting the specific needs of the behaviorally disordered.

Performance-Based Programs for Behaviorally Disordered Children

Performance-based programs focus on actual classroom problems, as defined by the teachers. Training content centers on the student behaviors which require change. This training is relevant to the teachers and provides a practical link between the training process and its content. Within this context, trainees examine the reasons for desiring change in student behavior and they participate in seeking solutions to behavior problems.

Performance-Based Teacher Preparation Programs Focused on Behavior

This development in training focuses upon actual teacher behaviors which may require change if programming needs for the behaviorally disordered are to be met. Skill acquisition in a number of areas -- behavior management, curriculum, and organization -- is stressed and is individualized to each teacher who is participating, thus insuring teacher input into the definition of behavior to be changed or skills to be added. Teachers participate in examining the rationale for learning skills and modifying behaviors.

The Application of Computer Technology to Special Education Personnel Development

The Computer-Assisted Teacher Training System (CATTS) builds into inservice training the important ingredient of feedback concerning the effects of teacher intervention upon pupil behavior. This feedback, which may be instant or delayed, deals with content which is teacher-defined and planned, and it focuses on actual alteration of teacher behavior in the classroom. CATTS, in conjuntion with the other elements, provides for inservice training which focuses upon (a) teacher-defined problems in a cooperative, planning mode; (b) actual change in teacher behavior; and (c) reasons for needed changes. It builds upon the actual participation of teachers and allows for systematic feedback on the effects of training upon behavior.

The Application of Instructional Development Technology

This technology makes available to teachers a wide variety of instructional materials which they may select for classroom use. This variety multiplies the options which teachers have for effecting change in classroom practice. Since the options are self-selected, they stimulate individual teachers to define objectives and bring about change.

Each of these emergent trends in special education provides an important tool for meeting the educational needs of the behaviorally disordered. When combined and adapted for use in inservice training, they should be an effective means of implementing appropriate objectives for the behaviorally disordered. Their use in a model inservice program should demonstrate their feasibility, practicality, and effectiveness as primary vehicles for inservice training. A more detailed rationale and development for each of these four areas is presented in the following sections.

The Development of a Performance-Based Program for Behaviorally Disordered Students

In order to build more effective educational interventions with the behaviorally disordered, the teacher must identify the functional skills required for the emotionally disturbed student's adaptation to his current environments. These functional skills can be defined in terms of the major sources of conflict between the student and his environments. These sources of conflicts or major problems may be defined as patterns of interaction which lead to perceptions of need for special services.

Generalizable patterns have been identified by the research of a number of individuals (Bullock & Brown, 1972; Quay, Morse & Cutler, 1966). These patterns have resulted in categories defining, for example, aggressive, withdrawn, and anxiety-ridden patterns of interaction. The general patterns and categories, although useful and widely used for research and diagnosis, have provided little if any help to the teacher faced with designing and implementing programs to assist students in the adjustment process (Reynolds, 1971). The specific classroom or classroom-related problems of individual disturbed children and the interventions which are needed must be identified from a different framework.

A more recent trend has been the identification, determination of frequency of occurrence, and modification of specific behaviors of individual disturbed students. While dramatic modification of specific behaviors has been achieved repeatedly (Axelrod, 1971; Glavin, Quay & Werry, 1971), this approach has certain pitfalls. If the specific behaviors to be modified are not viewed conceptually in relation to the other student behaviors and significant environments, the effects will not be maintained.

The problems of these two divergent approaches may be resolved by a systematic transition from specific behaviors into more abstract general patterns. The performance-based model for behaviorally disordered students focuses on such a combination. The model provides a base of specific student problem behaviors. This base flows into a composite of problem areas which define the major components of dysfunction for the behaviorally disturbed in the schools.

This model aids the teacher in identifying the specific problems of the child in such a way that the problems consistently build into patterns which define the behavior disorder within the generalized concepts of behavior disorders. These problem behaviors and patterns are not restricted to those which occur in the special class and which are associated with school. The focus is on the student's behavior in all the environments that he comes in contact with (including the home, the neighborhood, play area, etc.).

The model is based on the work of Geiger, Forgnone, and Brown (1974), who have shown the feasibility of this structured approach in working with trainable students.

The foundation of the proposed model consists of a large number of problem behaviors which have consistently recurred for disordered students. These behaviors are nested in four organizational levels, based on the similarity of the behavior. A two-way flow from specific behaviors to general categories is provided for the teacher.

Thus, the specific problems of the disturbed student in dealing with his environments can be viewed as part of the total pattern of his interaction with these environments. This can assist in the design of specific interventions for total student adjustment.

The Development of a Performance-Based Inservice Program for Teachers of Behaviorally Disordered Students

Performance-based programs for teacher preparation in special education are a relatively new development. Although much has been said about the benefits of such programs in regular education, very few programs have been developed in special education. Two notable recent developments have been (1) a competency-based program for identification and validation of competencies for consultant teachers (Schwartz, Oseroff, Drucker & Schwartz, 1972), and (2) a program for pre-service preparation of teachers of the emotionally disturbed (Bullock, Dykes & Kelly, 1973).

Although important, these programs don't tie teacher performance to student performance. Houston and Howsam (1972) have made progress in tying the two areas together.

In addition, Adilan (1973) has provided a conceptual overview of the application of competency-based training to special education personnel preparation. Procedures for the development of such programs in special education have also been evolved.

The application of the performance-based, teacher inservice education proposal in this model is linked directly to the performance of the behaviorally disordered students. The model performance-based program for teachers provides a framework which ties changes in teacher performance to changes in student performance. This provides for a validation of training activities and should lead to a maintenance of teacher behavior.

The Development and Application of the Computer-Assisted Teacher Training System (CATTS) in the Training of Special Education Personnel

The Computer-Assisted Teacher Training System (CATTS) has been under development for a number of years (Semmel, 1968). The system's development and application in a variety of training situations have been continuing at the Center for Innovation in Teaching the Handicapped (CITH), Indiana University, over the last four years.

The CATTS system provides for the systematic collection, summarization, analysis, feedback, storage, and retrieval of observations of teacher-pupil interactions through the use of a small computer with various input/output mechanisms. Thus, the system applies the computer to the rapid collection, processing, and feedback of observation data in the classroom.

Enough data have now been collected to indicate the importance of observation data in a training program. Immediate concurrent feedback has been used with success in counselor training (Reddy, 1968), psychotherapist training (Ward, 1960), and teacher training (Heinrich & Mckeegan, 1969; Spaulding, 1971; Thomson, Holmberg, & Baer, 1971).

However, more widespread use of observation data and observation systems has been limited by a number of factors:

1. The observing, coding, transcribing, summarizing, analyzing, and feeding back of results to the trainees has been time-consuming, inefficient, and uneconomical.

2. The summary feedback has usually been oversimplified and often does not provide useful summaries of the complex interaction patterns which are occurring.

3. The delay in feeding back the information has been considerable if a large amount of observational data is collected.

The CATTS system provides a solution to these restrictions in the use of observational data by providing for:

1. The elimination of the tedium associated with coding, summarizing, and analyzing teacher-pupil interactions;
2. meaningful analytic techniques for the rapid description and synthesis of teacher-pupil interactions while maintaining the essential variables and their temporal relationships;
3. instantaneous feedback of relevant information to the trainee while he is teaching.

Research with the system has demonstrated the importance of CATTS feedback in building skills of trainees in a number of paradigms. The CATTS system has been used: to train pre-service teachers of the mentally retarded to increase their use of broad questions (Schmitt, 1969); to train speech therapists to increase the use of social reinforcement patterns (VanEvery, 1971); and to increase trainees' use of pupils' ideas in classes for educable mentally retarded students (Weaver, 1969).

Recent CATTS work has studied the effects of different types of feedback; e.g., the effect of immediate visual and delayed (printout) feedback on increasing various cognitive and management behaviors of teacher trainees (Sitko, Semmel & Olson, et al., in press). It was found that the combination of the immediate visual and delayed feedback was twice as effective in increasing skill performance as the delayed feedback alone.

Field work with CATTS over the past year has included: feedback to teachers in the New York State open school for learning disabled and emotionally disturbed students; feedback to teachers in Cleveland, Ohio classes for educable mentally retarded; and feedback to regular class teachers in Hammond, Indiana.

The results from current work with CATTS, together with indications from earlier research, are very positive.

Several developments are underway which now make the adoption of CATTS by a local school system for inservice training feasible. They are:

1. A decline in the cost of the computer system.
2. The increasing ability of the computer system to provide effective, flexible inservice teacher training.
3. A decrease in the development time before an adopted system is functional.

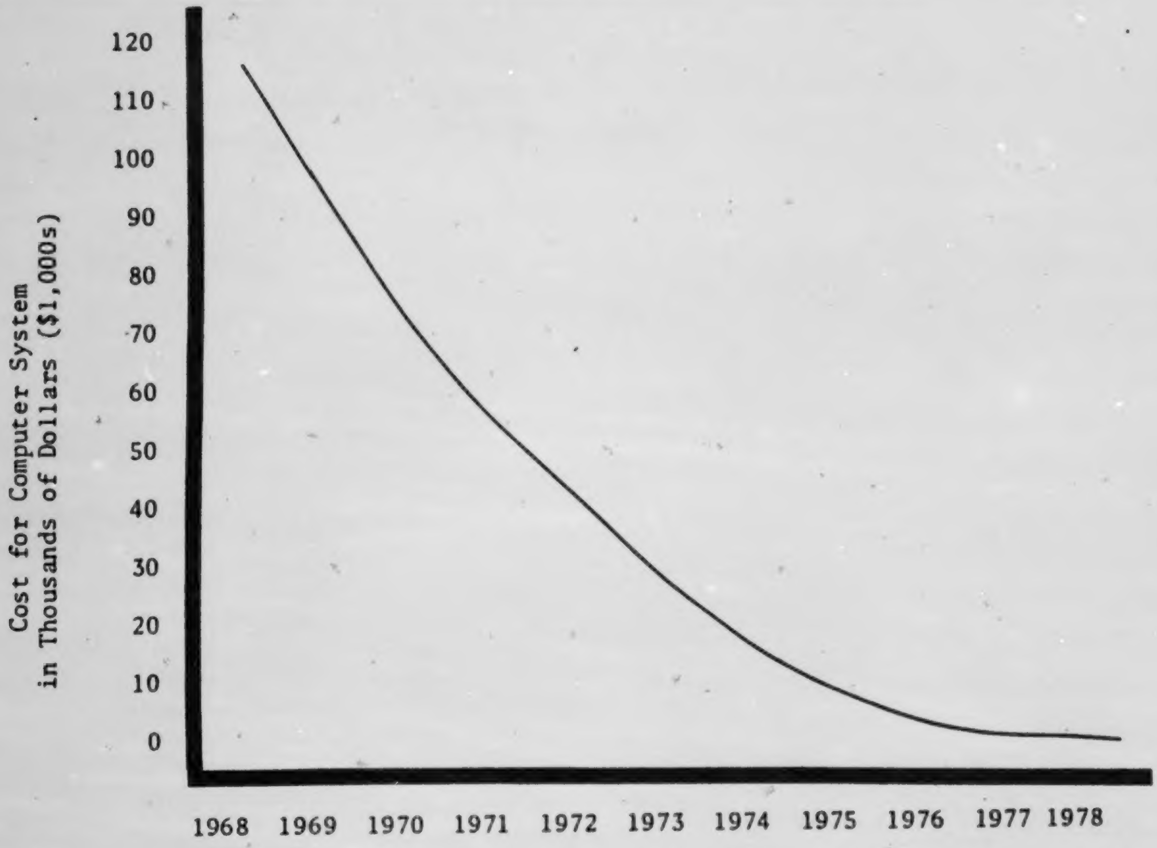
A brief consideration of each of these points follows.

The Cost of the Computer System

The cost of a computer which is capable of delivering the Computer-Assisted Teacher Training System has been consistently declining. The cost of the computer system in which the system was originally developed at the University of Michigan (Semmel, 1968) was $120,000. This was reduced to $60,000 when the Computer-Assisted Teacher Training System (Prototype II) was developed by CITH at Indiana University.

A computer system capable of delivering CATTS to a local school system could be acquired today for $15,000 if the intention was to provide facilities solely for training rather than for development activities. This decline in cost has been significant and should continue at a somewhat similar rate as computer systems are developed for a continuing number of applications.

The following chart indicates the decline in cost from 1968 to the present with a projection for cost decreases over the next few years.



It is anticipated that within five years a dedicated computer capable of processing CATTS could be acquired for $10,000. This is certainly not out of the reach of local school systems.

Also, if a given school system does not require the immediate feedback aspect of CATTS, recent developments by Semmel, Brown and Olson (1974) have made possible the processing of CATTS on a variety of time-sharing systems, which are already owned and used by local school systems. Thus, an additional computer would not be needed.

Additional developments (already in operation at CITH) in indirect hookups with the computer (via DATAMYTES and/or phone line) also make it possible for several school systems to use the same computer system.

All these developments point to a cost-feasible system which could be adopted by a large number of school systems.

The Power of the Computer System to Provide Effective and Flexible Teacher Training

A second consideration of a school system adopting a Computer-Assisted Teacher Training System should be the power of the particular computer system to provide effective and flexible capabilities for inservice training. Semmel, Brown, and Olson, (1974) have recently developed a power index for rating the ability of any given computer system to provide effective and flexible teacher training.

The initial index is based on:

a. the number of teachers that can be simultaneously coded;

b. the number of levels (related to complexity) of an observation system which can be processed;

c. the number of different observation systems which can be simultaneously coded;

d. the number of feedback modes (visual display, auditory, print);

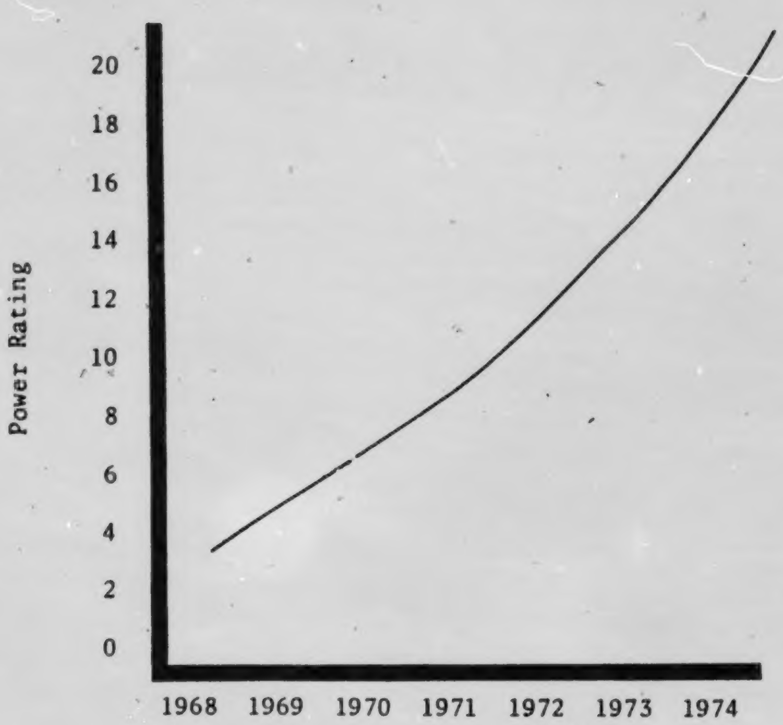
e. the number of simultaneous presentations via each mode;

f. the immediacy of the feedback (simultaneous, immediately after sessions, a number of hours after session).

The power index is calculated for any given system by using the following formula:

$$\text{Power Index} = A + (B*C) + \left[\left(\left[D*(1/N_e \;*\; (E_1 + E_2 \;.\;.\; E_n) \right] \right) \;/F \right]$$

Application of this procedure to the initial systems at Michigan in 1968, at IU in 1971, and a system which could be implemented in the school systems today at minimal cost, yields the following graph:



This demonstrates that the capabilities of the computer systems in opening possibilities for functional and flexible inservice training have continually been increasing.

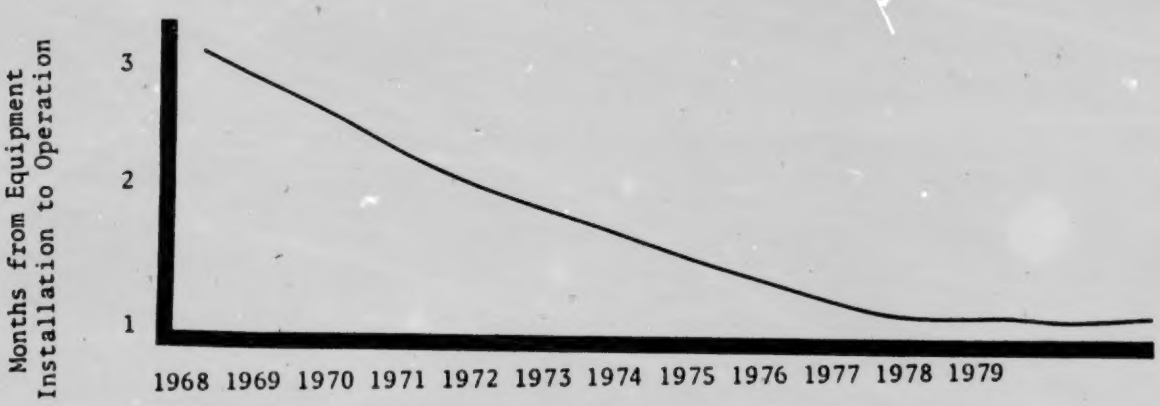
The Developmental Time Required Before an Adopted System is Functional

The time required for putting the CATTS system into operation has been continually reduced as a result of the expertise developed over six years of development, refinement, and application.

The development of the original software on which CATTS was first run at Michigan (Semmel, 1968) took place over a three-month period of time. When CATTS Prototype II was developed at Indiana University, the development time for the software of the system, after the equipment was installed, was reduced to two months.

It is anticipated that over the next several years this expertise will continue to increase. The development time from installation of a new computer and equipment to operation of the system is anticipated to be approximately one month.

The following graph indicates this significant decline in development time.



In summary, CATTS has proven to be a feasible, effective training vehicle in pre-service systems. Projects are now being conducted which should detail its effectiveness in a variety of inservice situations. The effectiveness of the system plus the continuing decrease in cost and development time make feasible the adoption of CATTS by local school systems in the immediate future as one aspect of an inservice training program.

Instructional Development

During the past few years an important new emphasis has appeared in teacher education for the handicapped. Teacher educators, together with special educators and instructional developers, have capitalized upon an increasing sophistication in instructional systems development and have begun close collaboration in an effort to provide innovative solutions to teacher training for the handicapped (Thiagarajan, Semmel & Semmel, 1974). One important outcome of this collaborative effort among special educators, instructional developers and teacher trainers, has been the development of a methodology for producing training materials for teachers. (This has been expanded to include materials for others who also may have crucial interface with handicapped children, e.g., paraprofessionals, tutors, school psychologists, parents.) A methodology which has been created for instructional development, and which gives every indication of having widespread potential for teacher education for the handicapped, has been devised by Thiagarajan, Semmel and Semmel (1974). Based upon the analysis of a variety of "systems" approaches and the incorporation of various heuristics gained in the field, the model can be defined as a systematic approach to designing, developing, evaluating, and diffusing training materials. The key elements of this "Four-D Model" are described in the following sections.

Stage I: Defining the Instructional Requirements

The purpose of this initial, analytical stage is to stipulate and define instructional requirements. Through analysis, objectives and constraints for the instructional materials are prescribed.

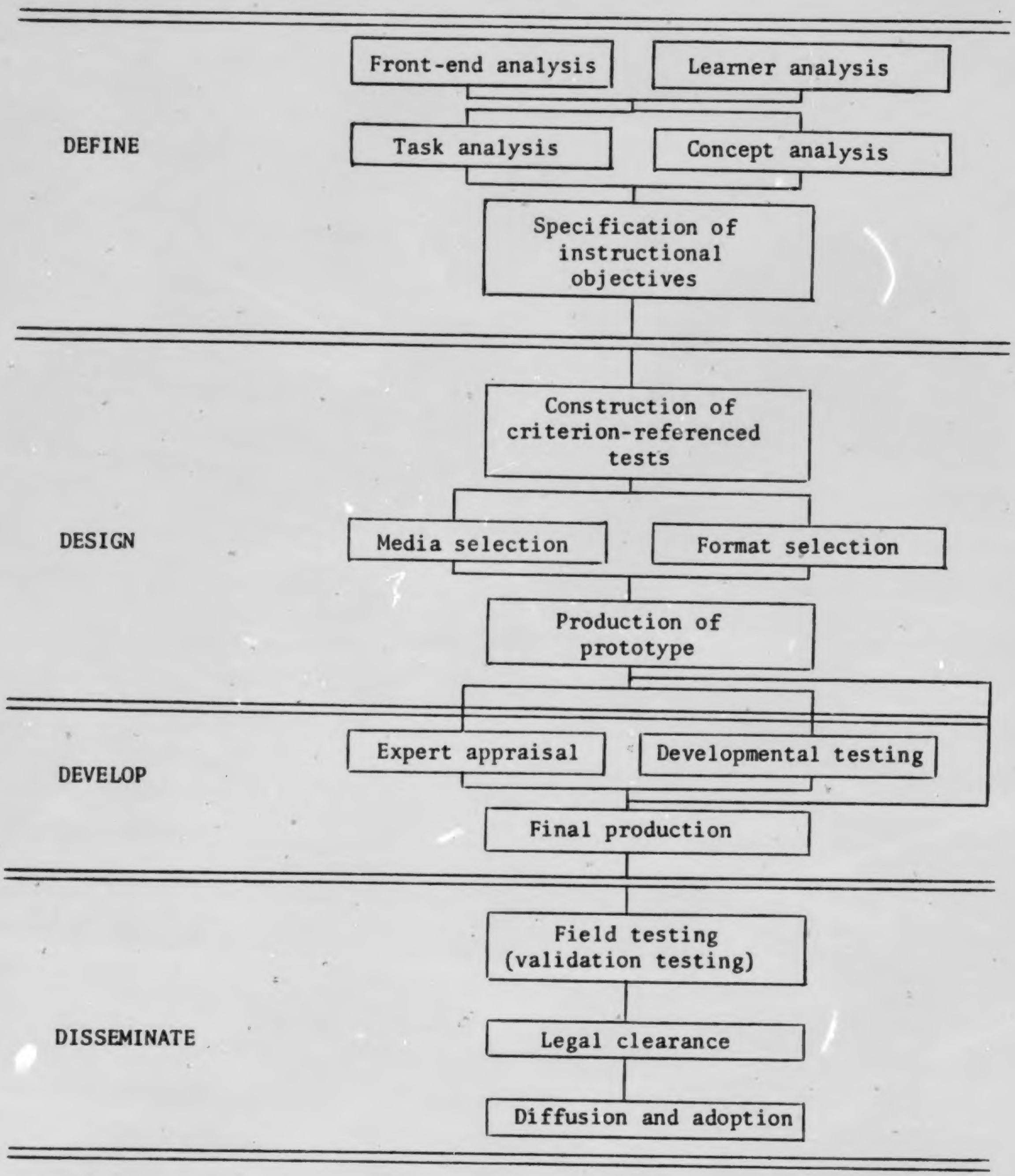

Front-end analysis
Learner analysis
DEFINE
Task analysis
Concept analysis
Specification of instructional objectives
Construction of criterion-referenced tests
DESIGN
Media selection
Format selection
Production of prototype
DEVELOP
Expert appraisal
Developmental testing
Final production
Field testing (validation testing)
DISSEMINATE
Legal clearance
Diffusion and adoption

Figure 1. Stages and steps in the systematic development of instructional materials: the Four-D Model.

1. Front-end analysis is the study of the basic problem facing the teacher of handicapped children -- how to raise the performance level of the child. During this analysis, the possibilities of more elegant and efficient alternatives to instruction are considered. If no possibilities are discovered, a search for relevant instructional materials already in circulation is conducted. If neither pertinent instructional alternatives nor materials are available, then the development of instructional materials is necessary.

2. Learner analysis is the study of the target students -- children or their teachers. Student characteristics relevant to the design and development of instruction are identified. The characteristics are: entering competencies and background experiences; general attitudes toward the instructional topic; and media, format, and language preferences.

3. Task analysis is the identification of the main skill to be acquired by the child or the teacher and its analysis into a set of necessary and sufficient subskills. This analysis insures comprehensive coverage of the task in the instructional material.

4. Concept analysis is the identification of the major concepts to be taught, their arrangement in hierarchies, and the breakdown of individual concepts into critical and irrelevant attributes. This analysis helps to identify a rational set of examples and non-examples to be portrayed in protocol development.

5. Specification of instructional objectives is the conversion of the results of task and concept analyses into behaviorally stated objectives. This set of objectives provides the basis for test construction and instructional design. Later, the objectives are integrated into the instructional materials for use by the instructor.

Stage II: Design

The purpose of this stage is to design prototype instructional material. This phase can begin after the set of behavioral objectives for the instructional materials has been established. Selection of media and formats for the materials and the production of an initial version constitute the major aspects of the design stage.

6. Construction of criterion-referenced tests is the step bridging Stage I, Define, and the Design process. Criterion-referenced tests convert behavioral objectives into an outline for the instructional material.

7. Media selection is the selection of appropriate media for the presentation of the instructional content. This process involves matching the task and concept analyses, target-trainee characteristics, production resources, and dissemination plans with various attributes of different media. Final selection identifies the most appropriate medium or combination of media for use.

8. Format selection is closely related to media selection and is dependent upon a number of factors, such as group size, need for stimulus variability, etc.

9. Production of prototype involves the assembly of the initial version of the material. It is the presentation of the essential instruction through a appropriate media in a suitable sequence.

Stage III: Develop

The purpose of Stage III is to modify the prototype instructional material. Although much has been produced since the Define stage, the results must be considered an initial version, to be modified several times before the instructional materials can become an effective final version.

In the development stage, feedback is received through formative evaluation and the materials are suitably revised.

10. Expert appraisal is a technique for obtaining suggestions for the improvement of the material. A number of experts are asked to evaluate the product from instructional and technical points of view. On the basis of their feedback, the material is then modified to make it more appropriate, effective and usable, and of high technical quality.

11. Developmental testing involves trying out the material with a sample of target students in order to locate sections for revision. On the basis of the response, reactions, and comments of the children and teachers, the material is modified. The cycle of testing, revising, and retesting is repeated until the material works consistently and effectively.

Stage IV: Disseminate

Instructional materials reach their final production stage when developmental testing yields consistent results and expert appraisal yields positive comments.

12. Field testing involves a summative evaluation through extensive field testing undertaken before disseminating the materials. In its validation-testing phase, the material is used under the replicable conditions to demonstrate "who learns what under what conditions in how much time" (Markle, 1967). The material is also subjected to professional examination for objective opinions on its adequacy and relevance.

13. Legal clearances. Before the release of the material, various copyright, royalty, and permission issues must be considered. For example, during this step permission is obtained from people who appear in photographs, videotapes, and films. Although instructionally irrelevant, this is a necessary prerequisite for widespread diffusion of the materials.

14. Diffusion and adoption. This step involves making potential consumers aware of the instructional materials and their effectiveness. Among other activities undertaken here is the production of descriptive literature which specifies why the instructional material was developed, how it works, who can use it, when to use it, what it is, and what it is not. Demonstrations and presentations of the materials in various professional gatherings are also useful in this process.

Even after an instructionally developed package has been adopted by a school system or training program, the diffusion process continues. Successful use of the material and its contents often depends upon the training of users of the materials, the assistance provided in this use, the availability of trouble-shooting special equipment, and the supply of consumable materials.

Evaluation Aspects of the Four-D Model

One of the unique features of the Four-D Model is its empirical orientation. Evaluation is an integral part of the model, and formative evaluation begins at very early stages of instructional development. The entire process is initiated by a needs assessment in the front-end analysis. Throughout the development process, the designer, subject-matter expert, and evaluator act as checks and balances to each other. The initial set of behavioral objectives which signals the termination of the first stage is independently evaluated by these three individuals for adequacy and accuracy. At every step during the development stage the script, the prototype, and the revised version undergo repeated appraisal by a professional jury of special educators, media production specialists, instructional designers, and content specialists. Additionally, and perhaps more importantly, the materials undergo repeated testing and modifications by individuals and groups representing the target population. This recycling process terminates only when satisfactory results are consistently obtained. Even later, during the field test for summative evaluation and actual implementation of the training packages, there are provisions for constant feedback and refinement of the materials.

Validation of the Four-D Model

The Four-D Model has been, and continues to be, refined and developed on the basis of reality-testing at CITH and elsewhere in the field. That the model has reached a satisfactory level of validity is borne out by the fact that it has been used in a number of different locations and under varied conditions with fairly consistent results. It thus appropriately serves as the model from which training materials will be developed in this project.

At CITH the importance of instructional development activities has resulted in the production of a wide array of teacher training materials and the exploration of many different formats and media for instruction.

Games and simulations are one format, suiting the needs and preferences of teachers, which have been emphasized at CITH. Simulations and games have long been recognized as possessing a number of unique advantages for the training of the teacher (Cruickshank, 1967; Fink, 1973), especially the teacher of handicapped children. A number of distinct forms of simulation/games have been developed at CITH, and they give evidence of providing valuable experience to teacher trainees in the area of academic and affective behavior of the behaviorally disordered child.

Simulation Games Involving Structured Roleplay

Activities that train teachers in the area of behavior management (Fink, Adams, Briggs & Thiagarajan, 1973) have been a major development in the field of simulation. In this format the player's role is usually that of child or teacher. Other relevant figures in special education (e.g., parents and principals) are also sometimes represented. Each of these structured roleplay modules lasts from 30 to 45 minutes and has built into it delineating items, making it self-contained. Typically, a number of modules deal with the same topic, but each one is independent of the others in order to permit flexible use. Eleven such structured modules exist in the area of behavior management. Four other roleplay segments deal with the topic of mainstreaming (Briggs & Guskin, 1974).

CITH has thus developed considerable instructional material for special education teacher training. Self-contained teacher-training materials have wide applicability in teacher training generally, as well as particular use in inservice education of teachers of the behaviorally disordered. The model inservice training program which is proposed here integrates appropriate instructional materials into the training program and develops new applications of instructional technology. Particular emphasis is placed upon the use of simulations.

In summary then, the model inservice training program which is proposed here combines aspects of competency-based programs with developments in computer-assisted teaching systems and instructional technology to provide a flexible inservice training program for teachers of the behaviorally disordered. In this section, the rationale for the use of each of these developments in education has been examined and has been related to the demonstrated need for improved inservice training in general. This problem provides a response to the mounting needs for more adequate educational programming for the behaviorally disordered.

In the section which follows the results and benefits expected from implementation of this proposal are detailed.

CHAPTER IV

Methods

In July, 1975, a planning workshop was conducted with Indiana Public School teachers of the emotionally disturbed in order to determine what behaviors were typical problem behaviors of emotionally disturbed children, what priorities teachers placed on the modification of specific behaviors, and what skills the teachers deemed as most critical for effective interaction with emotionally disturbed students. Twelve teachers assigned to three target schools participated in the workshop. All teachers had taught at least one year in classrooms for emotionally disturbed children. Students ranged in grade level from primary to junior high with the largest number of students in intermediate elementary grades.

Several teachers were reassigned to different schools or different classrooms in the fall, thus making them ineligible for participation in the project. The project began with seven teachers in September, and one additional teacher who had not taken part in the workshop was included in January, 1976, bringing the total number to eight. Of these eight, six were females and two, males.

Planning Workshop

The planning workshop took place in Indianapolis from 9:00 a.m. to 4:00 p.m. on three successive days. Early discussion was general and included information as to the background of all participants related to the field of emotional disturbance.

The workshop was divided into a concentration on two areas: desired teacher skills for functioning in classrooms for emotionally disturbed children, and problem behaviors of and desirable social skills for emotionally disturbed students. The first day and a half was devoted to a discussion and explication of skills regarded as important by the teachers present.

Typical behaviors of disturbed children were delineated by the teachers following a short general discussion. Teachers were asked to choose two students whom they had taught in the previous year and complete a case history on each student which indicated frequency and duration of specific undesirable behaviors (Case Report on Problem Behaviors, Appendix A). After completing the Case Report, each teacher shared information on one student with the entire group,including a description of specific interventions which had been used by the teacher in an attempt to modify inappropriate behaviors. The teachers themselves described this process as extremely helpful, since opportunities for such an exchange of information were rare. Furthermore, teachers claimed to find reassurance and encouragement in the fact that consistent inappropriate behavior of disturbed students was not confined to only one or two classrooms (i.e., their own).

Two additional forms were completed by the teachers: 1) the Master List of Socio-Behavioral Problems and Skills for Students to Master (Appendix B), a list of 57 behaviors that teachers rated as to whether they Should be Included, Should be Clarified or Should Not be Included, and 2) a short form of Goals and Objectives for Disturbed Students (Appendix C). Behaviors on the Master List were drawn from the literature, and space was provided for teachers to add behaviors if they so desired.

Information from both the Master List and the Goals and Objectives was synthesized by the project staff into a statement of nine Goals for B.D. Students. Related subgoals were defined and a list of appropriate behaviors and problem indicators was attached to each subgoal (see Appendix D). The resulting organization of social skills and problem behaviors for disturbed children is contained in Figure 2.

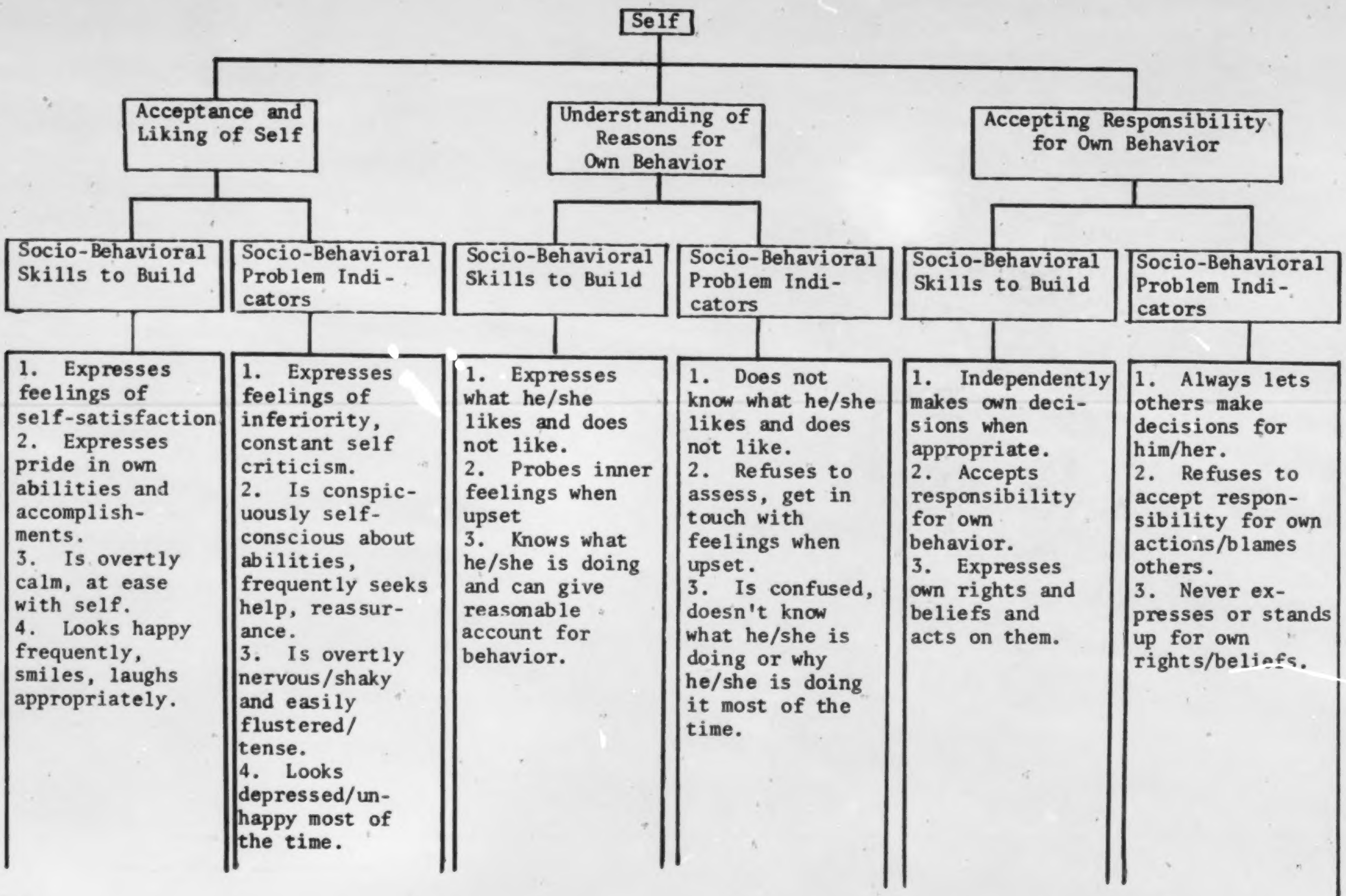
Observation Systems

An existing observation system (Systematic Observation for BOCES), (Frick, Hasselbring, Perkey, Olson & Brownsmith, 1974), was modified to reflect the input from teachers on the problems of disturbed students. The following are a few of the modifications. Categories of cooperative neutral or uncooperative behavior were reduced to cooperative vs. uncooperative, and the category of location was dropped. The dimension of peer interaction with target pupil was added to Pupil and Teacher Interaction in order to gain a fuller picture of classroom behavior. Both Activity and Movement Categories were retained. Finally, although the Sign System was modeled on that of the original system, teacher input as to desirable behaviors and problem indicators of disturbed children was also used, resulting in the addition and modification of many behavior statements. Thus, the resulting social interaction observation system (S.I.S) focused on behaviors considered as important by participating teachers as well as project staff. A copy of the training manual is contained in Appendix E.

Present Description of System

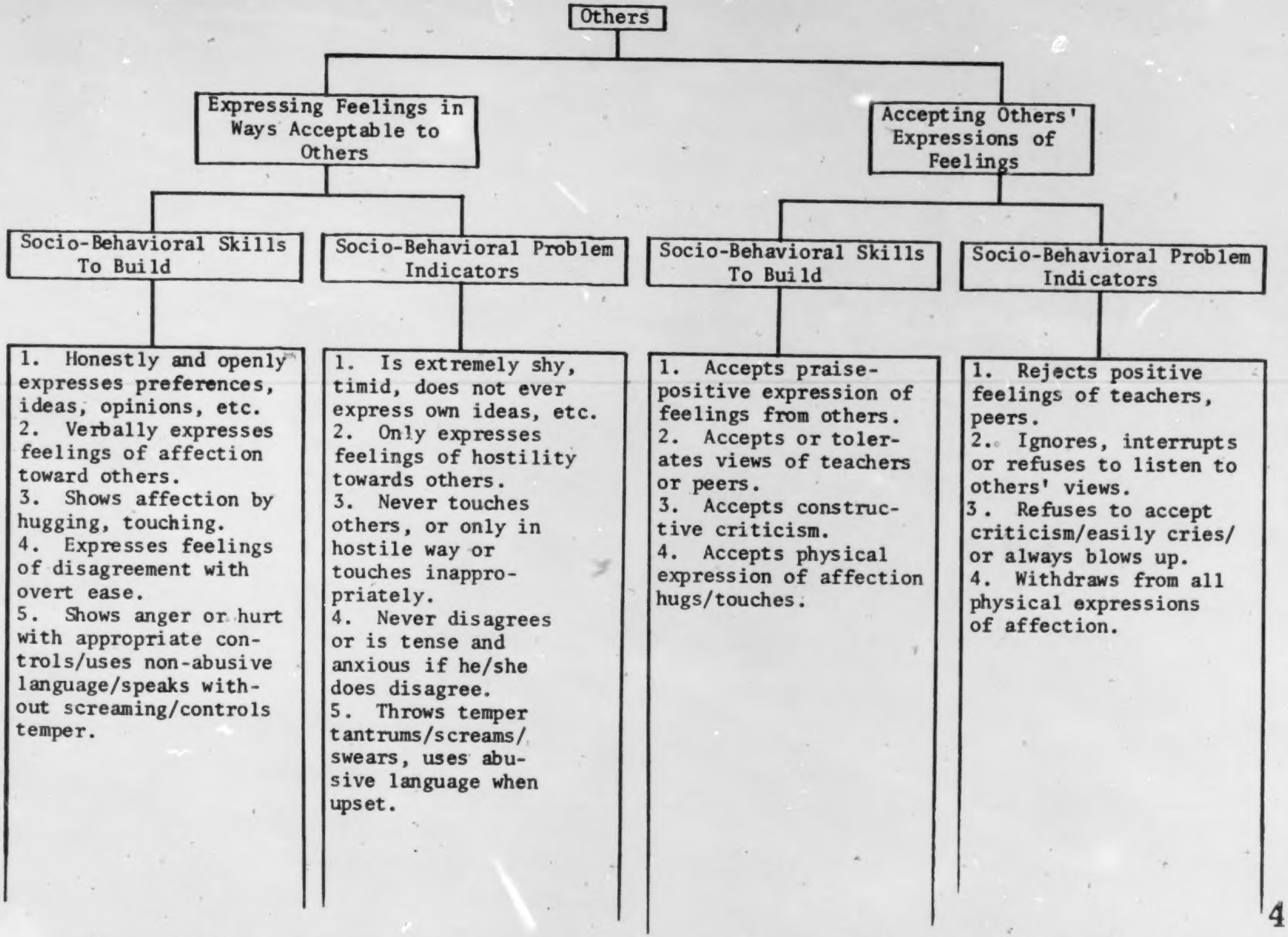
Observers were selected by the project staff on the basis of years of education (at least two) and major areas from a group of students who responded to advertisement of the job. It was felt that students with a background in social sciences might be better observers of behavior in a classroom than students in, for example, physics or literature. Another selection factor was the time available for observation; students who could observe at least twice a week were considered before students who could only

Figure 2. Organizational Model of Socio-Behavioral Skills and Problem Indicators



- Self
  - Acceptance and Liking of Self
    - Socio-Behavioral Skills to Build
      1. Expresses feelings of self-satisfaction.
      2. Expresses pride in own abilities and accomplishments.
      3. Is overtly calm, at ease with self.
      4. Looks happy frequently, smiles, laughs appropriately.
    - Socio-Behavioral Problem Indicators
      1. Expresses feelings of inferiority, constant self criticism.
      2. Is conspicuously self-conscious about abilities, frequently seeks help, reassurance.
      3. Is overtly nervous/shaky and easily flustered/tense.
      4. Looks depressed/unhappy most of the time.
  - Understanding of Reasons for Own Behavior
    - Socio-Behavioral Skills to Build
      1. Expresses what he/she likes and does not like.
      2. Probes inner feelings when upset
      3. Knows what he/she is doing and can give reasonable account for behavior.
    - Socio-Behavioral Problem Indicators
      1. Does not know what he/she likes and does not like.
      2. Refuses to assess, get in touch with feelings when upset.
      3. Is confused, doesn't know what he/she is doing or why he/she is doing it most of the time.
  - Accepting Responsibility for Own Behavior
    - Socio-Behavioral Skills to Build
      1. Independently makes own decisions when appropriate.
      2. Accepts responsibility for own behavior.
      3. Expresses own rights and beliefs and acts on them.
    - Socio-Behavioral Problem Indicators
      1. Always lets others make decisions for him/her.
      2. Refuses to accept responsibility for own actions/blames others.
      3. Never expresses or stands up for own rights/beliefs.

Figure 2 (Cont'd)



Others

Expressing Feelings in Ways Acceptable to Others

Socio-Behavioral Skills To Build

1. Honestly and openly expresses preferences, ideas, opinions, etc.
2. Verbally expresses feelings of affection toward others.
3. Shows affection by hugging, touching.
4. Expresses feelings of disagreement with overt ease.
5. Shows anger or hurt with appropriate controls/uses non-abusive language/speaks without screaming/controls temper.

Socio-Behavioral Problem Indicators

1. Is extremely shy, timid, does not ever express own ideas, etc.
2. Only expresses feelings of hostility towards others.
3. Never touches others, or only in hostile way or touches inappropriately.
4. Never disagrees or is tense and anxious if he/she does disagree.
5. Throws temper tantrums/screams/swears, uses abusive language when upset.

Accepting Others' Expressions of Feelings

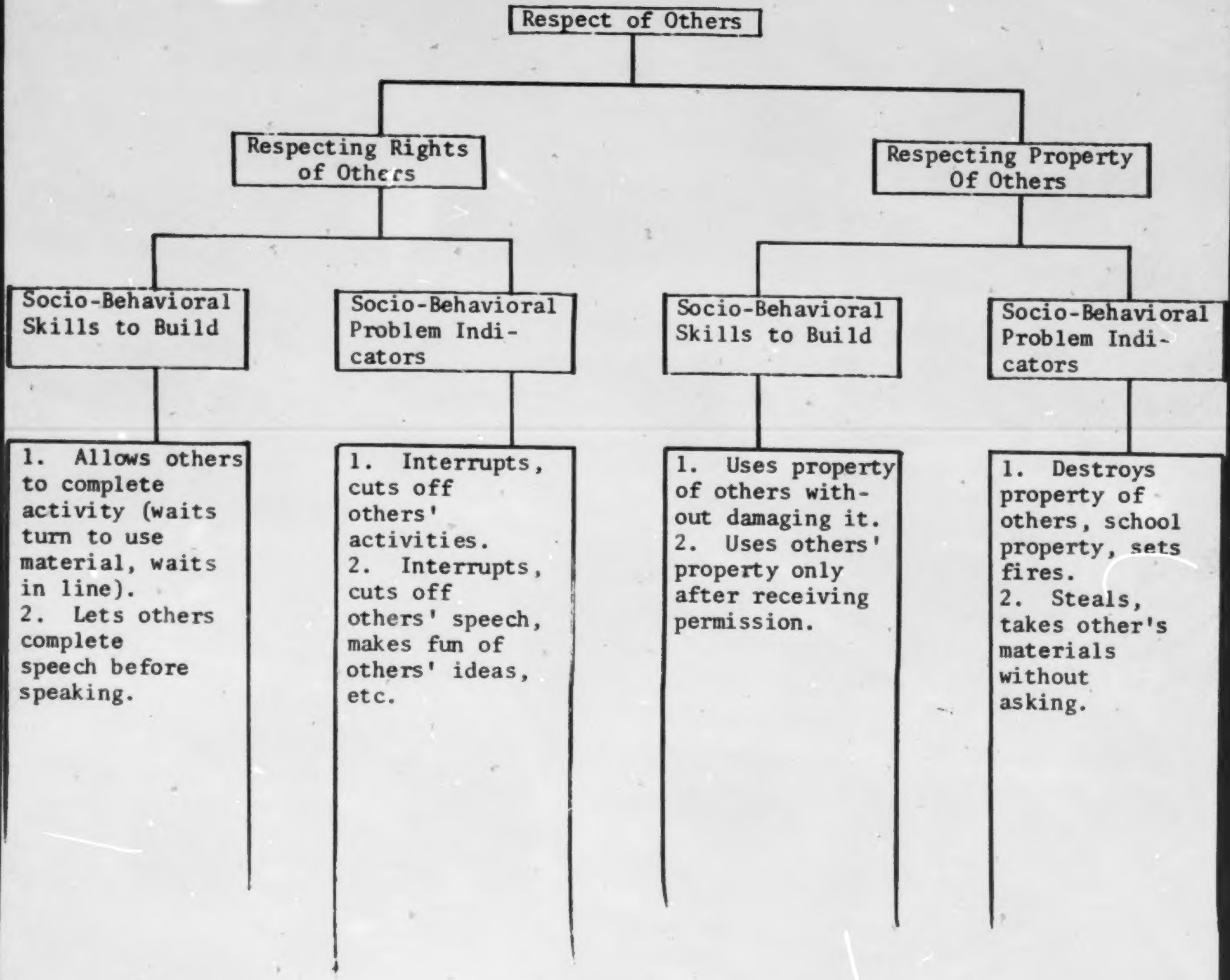
Socio-Behavioral Skills To Build

1. Accepts praise-positive expression of feelings from others.
2. Accepts or tolerates views of teachers or peers.
3. Accepts constructive criticism.
4. Accepts physical expression of affection hugs/touches.

Socio-Behavioral Problem Indicators

1. Rejects positive feelings of teachers, peers.
2. Ignores, interrupts or refuses to listen to others' views.
3. Refuses to accept criticism/easily cries/or always blows up.
4. Withdraws from all physical expressions of affection.

Figure 2 (Cont'd)



Respect of Others

Respecting Rights of Others

Socio-Behavioral Skills to Build

1. Allows others to complete activity (waits turn to use material, waits in line).
2. Lets others complete speech before speaking.

Socio-Behavioral Problem Indicators

1. Interrupts, cuts off others' activities.
2. Interrupts, cuts off others' speech, makes fun of others' ideas, etc.

Respecting Property Of Others

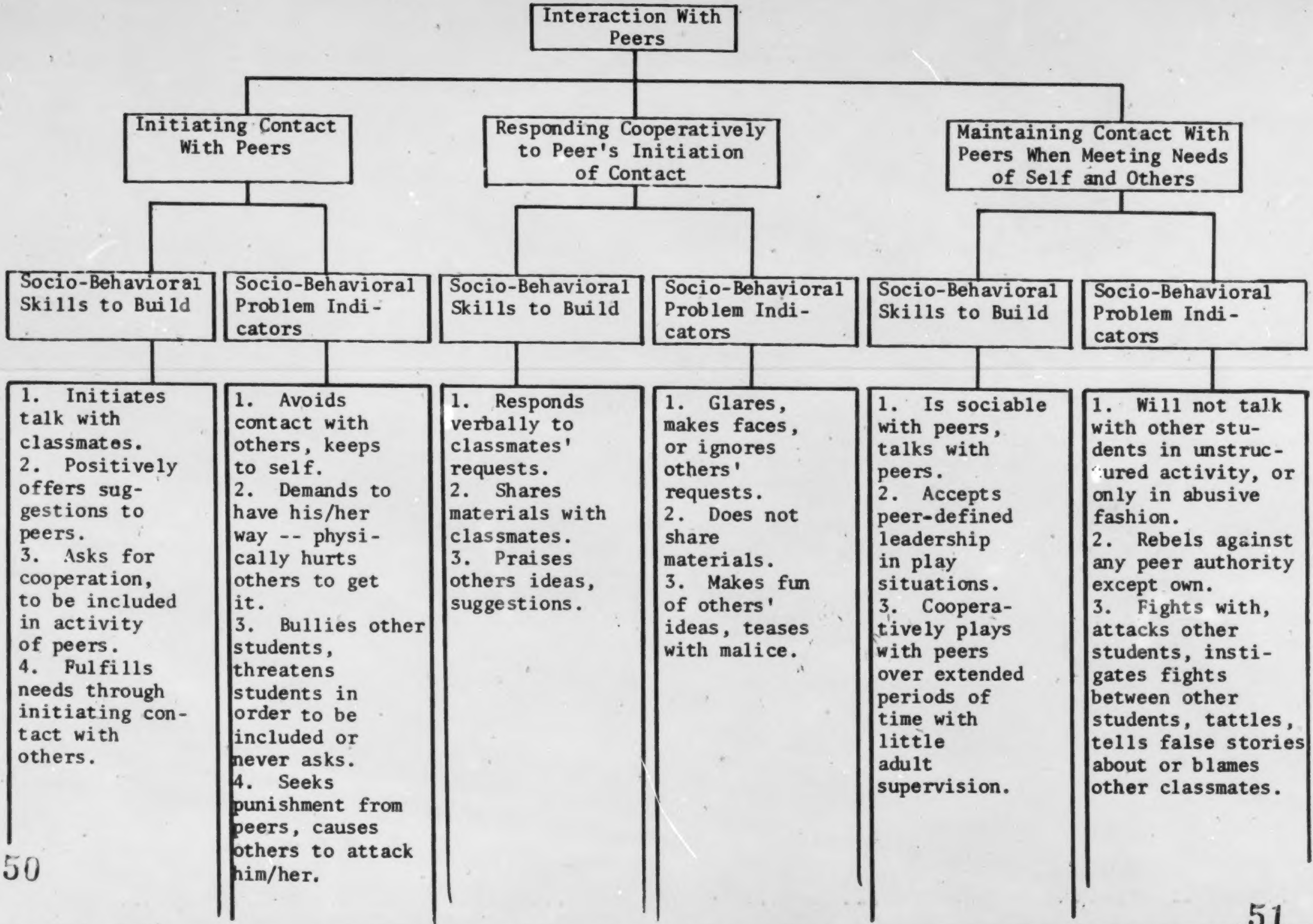
Socio-Behavioral Skills to Build

1. Uses property of others without damaging it.
2. Uses others' property only after receiving permission.

Socio-Behavioral Problem Indicators

1. Destroys property of others, school property, sets fires.
2. Steals, takes other's materials without asking.

Figure 2 (Cont'd)



Interaction With Peers

Initiating Contact With Peers

Socio-Behavioral Skills to Build

1. Initiates talk with classmates.
2. Positively offers suggestions to peers.
3. Asks for cooperation, to be included in activity of peers.
4. Fulfills needs through initiating contact with others.

Socio-Behavioral Problem Indicators

1. Avoids contact with others, keeps to self.
2. Demands to have his/her way -- physically hurts others to get it.
3. Bullies other students, threatens students in order to be included or never asks.
4. Seeks punishment from peers, causes others to attack him/her.

Responding Cooperatively to Peer's Initiation of Contact

Socio-Behavioral Skills to Build

1. Responds verbally to classmates' requests.
2. Shares materials with classmates.
3. Praises others ideas, suggestions.

Socio-Behavioral Problem Indicators

1. Glares, makes faces, or ignores others' requests.
2. Does not share materials.
3. Makes fun of others' ideas, teases with malice.

Maintaining Contact With Peers When Meeting Needs of Self and Others

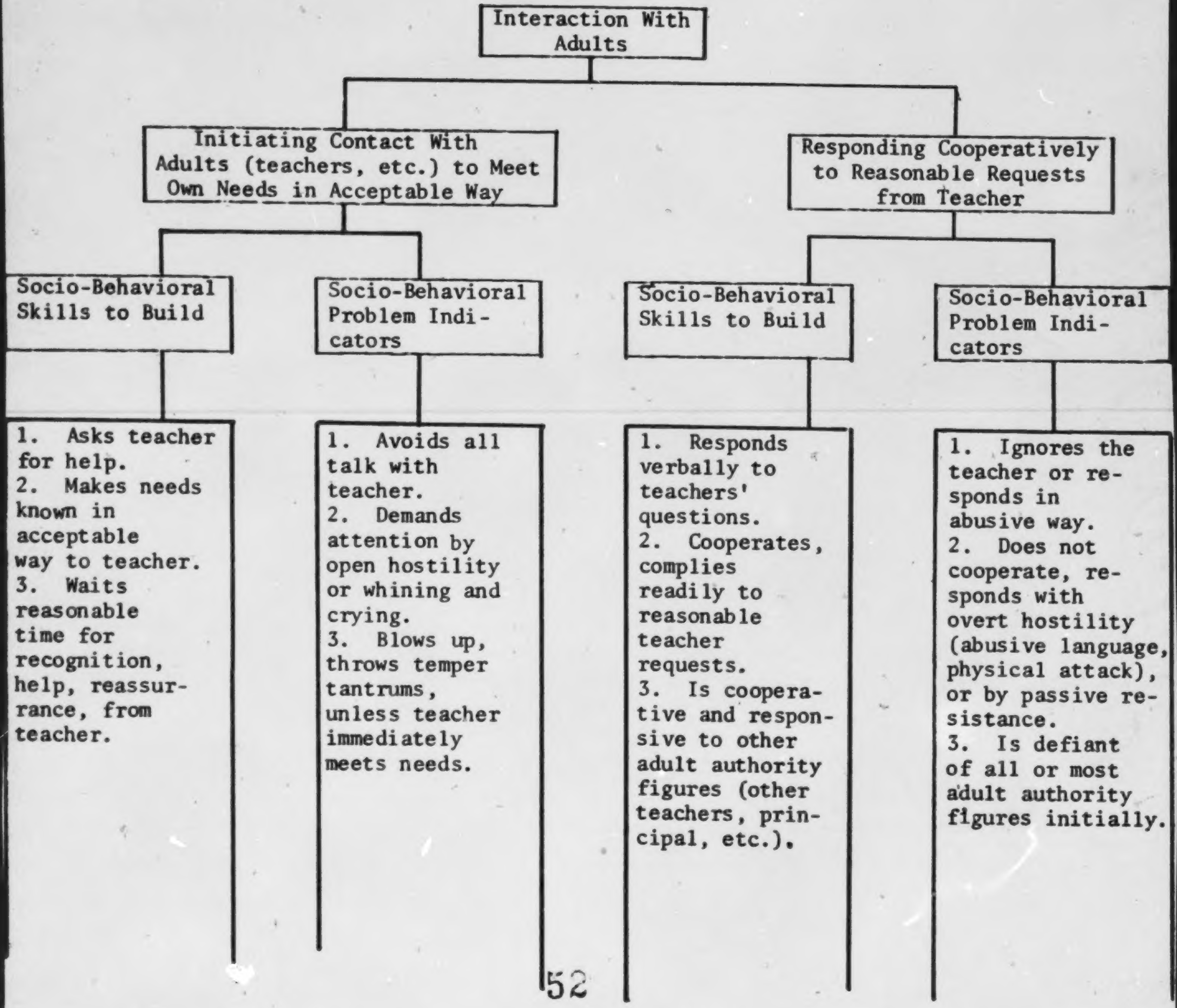
Socio-Behavioral Skills to Build

1. Is sociable with peers, talks with peers.
2. Accepts peer-defined leadership in play situations.
3. Cooperatively plays with peers over extended periods of time with little adult supervision.

Socio-Behavioral Problem Indicators

1. Will not talk with other students in unstructured activity, or only in abusive fashion.
2. Rebels against any peer authority except own.
3. Fights with, attacks other students, instigates fights between other students, tattles, tells false stories about or blames other classmates.

Figure 2 (Cont'd)


Interaction With Adults
Initiating Contact With Adults (teachers, etc.) to Meet Own Needs in Acceptable Way
Responding Cooperatively to Reasonable Requests from Teacher
Socio-Behavioral Skills to Build
Socio-Behavioral Problem Indicators
Socio-Behavioral Skills to Build
Socio-Behavioral Problem Indicators

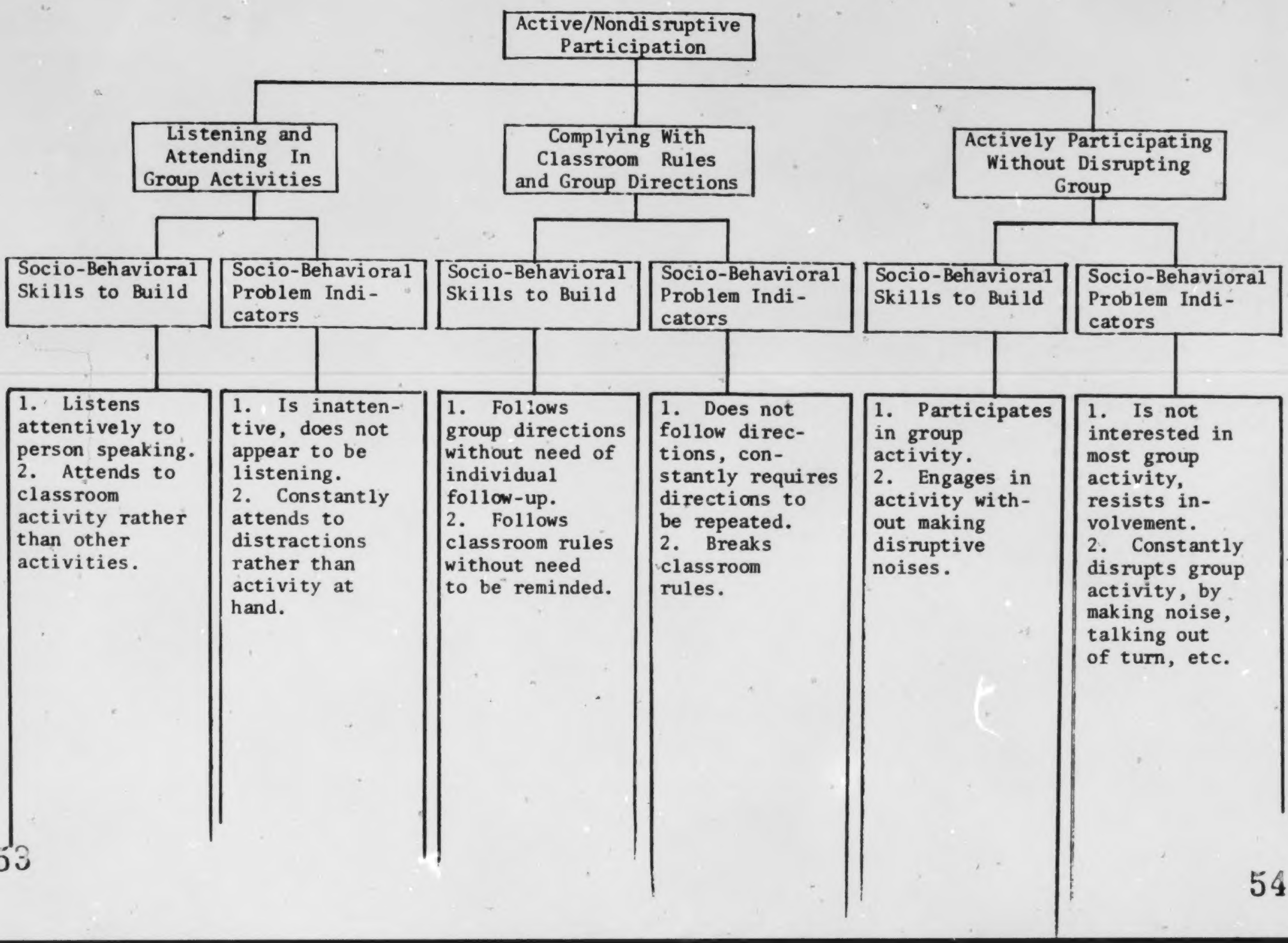
1. Asks teacher for help.
2. Makes needs known in acceptable way to teacher.
3. Waits reasonable time for recognition, help, reassurrance, from teacher.

1. Avoids all talk with teacher.
2. Demands attention by open hostility or whining and crying.
3. Blows up, throws temper tantrums, unless teacher immediately meets needs.

1. Responds verbally to teachers' questions.
2. Cooperates, complies readily to reasonable teacher requests.
3. Is cooperative and responsive to other adult authority figures (other teachers, principal, etc.).

1. Ignores the teacher or responds in abusive way.
2. Does not cooperate, responds with overt hostility (abusive language, physical attack), or by passive resistance.
3. Is defiant of all or most adult authority figures initially.

Figure 2 (Cont'd)



Active/Nondisruptive Participation

Listening and Attending In Group Activities

Socio-Behavioral Skills to Build

1. Listens attentively to person speaking.
2. Attends to classroom activity rather than other activities.

Socio-Behavioral Problem Indicators

1. Is inattentive, does not appear to be listening.
2. Constantly attends to distractions rather than activity at hand.

Complying With Classroom Rules and Group Directions

Socio-Behavioral Skills to Build

1. Follows group directions without need of individual follow-up.
2. Follows classroom rules without need to be reminded.

Socio-Behavioral Problem Indicators

1. Does not follow directions, constantly requires directions to be repeated.
2. Breaks classroom rules.

Actively Participating Without Disrupting Group

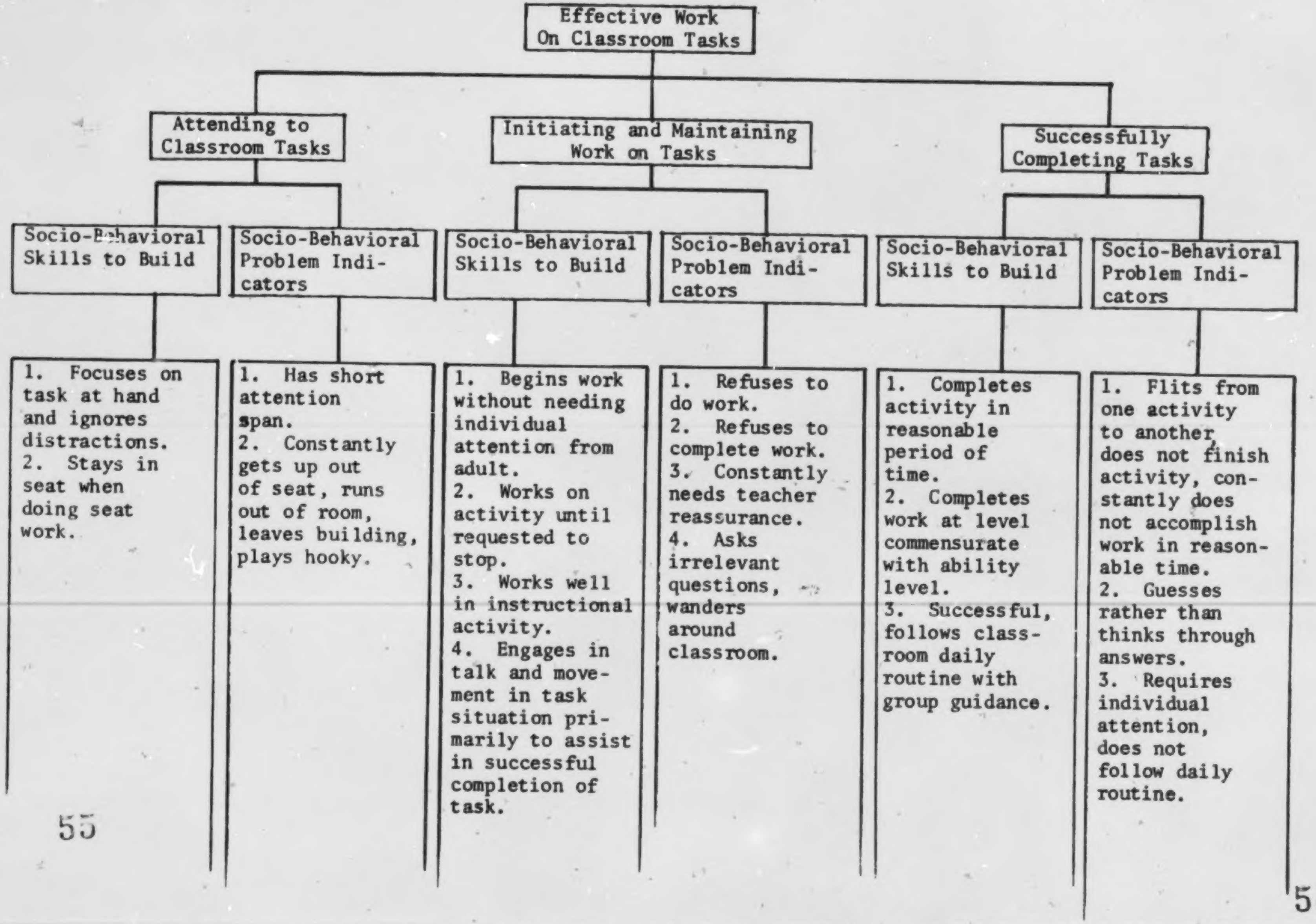
Socio-Behavioral Skills to Build

1. Participates in group activity.
2. Engages in activity without making disruptive noises.

Socio-Behavioral Problem Indicators

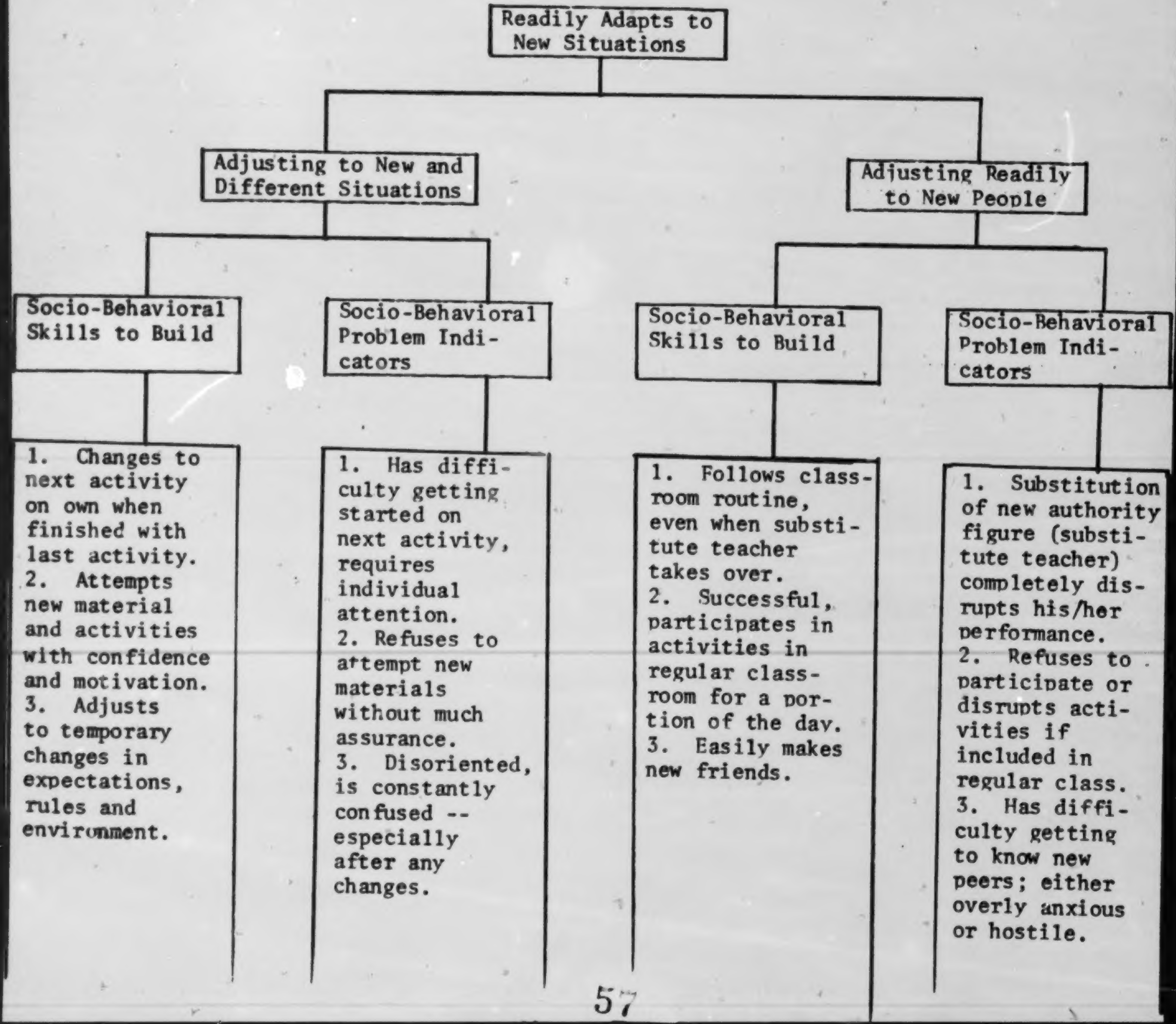
1. Is not interested in most group activity, resists involvement.
2. Constantly disrupts group activity, by making noise, talking out of turn, etc.

Figure 2 (Cont'd)



- Effective Work On Classroom Tasks
  - Attending to Classroom Tasks
    - Socio-Behavioral Skills to Build
      1. Focuses on task at hand and ignores distractions.
      2. Stays in seat when doing seat work.
    - Socio-Behavioral Problem Indicators
      1. Has short attention span.
      2. Constantly gets up out of seat, runs out of room, leaves building, plays hooky.
  - Initiating and Maintaining Work on Tasks
    - Socio-Behavioral Skills to Build
      1. Begins work without needing individual attention from adult.
      2. Works on activity until requested to stop.
      3. Works well in instructional activity.
      4. Engages in talk and movement in task situation primarily to assist in successful completion of task.
    - Socio-Behavioral Problem Indicators
      1. Refuses to do work.
      2. Refuses to complete work.
      3. Constantly needs teacher reassurance.
      4. Asks irrelevant questions, wanders around classroom.
  - Successfully Completing Tasks
    - Socio-Behavioral Skills to Build
      1. Completes activity in reasonable period of time.
      2. Completes work at level commensurate with ability level.
      3. Successful, follows classroom daily routine with group guidance.
    - Socio-Behavioral Problem Indicators
      1. Flits from one activity to another, does not finish activity, constantly does not accomplish work in reasonable time.
      2. Guesses rather than thinks through answers.
      3. Requires individual attention, does not follow daily routine.

Figure 2 (Cont'd)



Readily Adapts to New Situations

Adjusting to New and Different Situations

Socio-Behavioral Skills to Build

1. Changes to next activity on own when finished with last activity.
2. Attempts new material and activities with confidence and motivation.
3. Adjusts to temporary changes in expectations, rules and environment.

Socio-Behavioral Problem Indicators

1. Has difficulty getting started on next activity, requires individual attention.
2. Refuses to attempt new materials without much assurance.
3. Disoriented, is constantly confused -- especially after any changes.

Adjusting Readily to New People

Socio-Behavioral Skills to Build

1. Follows classroom routine, even when substitute teacher takes over.
2. Successful, participates in activities in regular classroom for a portion of the day.
3. Easily makes new friends.

Socio-Behavioral Problem Indicators

1. Substitution of new authority figure (substitute teacher) completely disrupts his/her performance.
2. Refuses to participate or disrupts activities if included in regular class.
3. Has difficulty getting to know new peers; either overly anxious or hostile.

observe once a week. Aside from questions of cost, the staff felt that observers who worked more than once a week would have a higher probability of becoming reliable coders than those who only participated once a week.

Fifteen coders were selected to attend a two-day workshop with follow-up training in the coding process. The purpose and rationale of the project were explained at length by project staff before giving a thorough explication of the Observation System itself. Observers were given the Observers' Manual which consisted of directions for coding on both DATAMYTES and TOUCH TONE Telephone, all categories of pupil, teacher, peer behavior, movement and activity, and the Sign System. Three practice scripts were also included.

Following the discussion, observers were asked to read Part I of the manual and to code the first practice script. Observers were encouraged to ask questions and several points were clarified. Observer agreement in coding the practice script was remarkably high.

After lunch, a segmented practice tape was displayed on two TV monitors; the early practice tape involved one teacher and one or two children in a role-playing situation. Observers first coded on paper the categories of movement and activity about which there was general agreement. The tape was then repeated with the addition of one category at a time; in order, these categories were pupil, teacher and peer behavior. Whenever disagreement occurred as to the correct code, the tape was stopped and discussion ensued. When agreement was reached, the practice tape was continued. By the second day, observers were coding all five categories on the practice tape.

On Day 2, the practice tape was replaced by a non-segmented tape showing activities in an open classroom setting while focusing on the behavior of one or two target students. Observers were divided into two groups, one coding on the CATTS DITRMA system and one with paper and pencil. All observers were allotted time to become familiar with the CATTS system of training, called DITRMA. DITRMA is a computer-directed training program in which a training film is displayed on the TV monitor and five push button pads are available for coding at one time. One of the five is the Master box which can start and stop the film. When observer disagreement occurs, the film stops and exhibits the numbers coded on the screen. The film continues when agreement is reached.

At the end of the second day, procedures for completing the Observer's Log and for encoding Log-in and Log-out data on both DATAMYTES and TOUCH-TONE Telephones were discussed. The Observer's Log is a written record of Log-in, Log-out data for each coding session with space for comments if appropriate or necessary.

The final task of the workshop consisted of planning and assigning follow-up times for practice and reliability checks for each observer during the following week. Seven sessions, three hours in duration, were planned; each observer was assigned to two sessions. At least one staff member was present at each session. Observers who felt that extra practice was necessary were encouraged to schedule more than two sessions. Further reliability checks were conducted during the first week of live coding in the classroom. Observers using DATAMYTES were assigned in pairs to classrooms and data was later analyzed as to degree of agreement. Much of the data from the DATAMYTES was lost due to machine and cutter problems. The mean percentage observer agreement on cooperative vs. uncooperative student behavior was 86% at the beginning of data collection and 90% at the end of data collection.

58-A

Data Collection

Observation data were collected by the observers using: TOUCH-TONE Telephone hookups with the PDP-12 computer at CITH, and DATAMYTES portable data recorders. Original plans called for exclusive use of TOUCH-TONE Telephone, but the necessity of concurrent observation in more than one classroom in a school for this and two other projects made use of the DATAMYTE system necessary.

For the TOUCH-TONE system, telephone jacks were installed in the classrooms of teachers participating in the inservice training. When using this system the observers picked up the TOUCH-TONE telephone from the school office when checking in, went to the assigned classroom, and connected the portable TOUCH-TONE telephone to the jack. The observer then dialed the assigned telephone number which connected directly to a data set at CITH. This Data Set decided the TOUCH-TONES into electronic configurations which were then processed by the PDP-12 computer.

For the DATAMYTE system no direct connections were necessary. The data recorders consist of a hand-held unit which contains a TOUCH-TONE configured button pad for data entry and a connected cassette tape recorder for recording button entries. Since time between category entries is important in assigning cumulative time to various behaviors, data recorders also record these time intervals.

Whether the observers used the TOUCH-TONE telephone or DATAMYTES, the procedure for data entry was the same. First the observers signed on by entering identification circles, and then they proceeded to circle category system data for a 10-minute period of time. After the elapse of 10 minutes, they collected the sign system data. In all eight classrooms these two students were identified as target students or the students with whom the teachers had the most difficulty. The coders would code the behavior of one student for 10 minutes and then code the behavior of the second student for the next 10 minutes. They would then return and code the behavior of the first student for the third 10-minute period and the second for the fourth 10-minute period. This procedure was not always followed due to absences of one or the other student during the scheduled observation times and out-of-classroom activities such as fire drills.

Individual schedules were designed for each teacher. This schedule was a compromise between the times desired by the teacher and the times of efficient scheduling observers. Figure 3 provides the schedule which was used for the greatest portion of the data collection. The actual observation times varied somewhat from this schedule due to special events at the schools such as field trips and observer absences.

Data Collection and Analysis Problems

A number of data collection and analysis problems were encountered during the process of the project which will be discussed before proceding to the evaluation design.

As was indicated earlier, two systems of data collection were used, phone line and DATAMYTES. Both systems caused some loss of data. During the first week of training in the field, at which time observers' agreement data was to be collected, it was discovered that the phone data collection system was working in only one of the three schools. The problem at one school was very minor -- in the phone itself -- and was fixed the next week. The problem in the other school was more serious. The problem was in the phone line and required numerous visits from the phone company, resulting in some

Figure 3

Observation Schedule by School for each Teacher

INSTEP
Observation Schedule
Project 1
School 45

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30		D.C.*		G.P.	
9:45		↓		↓	
10:00		↓		↓	
10:15		↓		↓	
10:30		G.P.		D.C.	
10:45		↓		↓	
11:00		↓		↓	
11:15		↓		↓	
11:30		G.P.		D.C.	
11:45		↓		↓	
12:00		↓		↓	
12:15		↓		↓	
12:30					
12:45			G.P.		
1:00			↓		
1:15			↓		
1:30			↓		
1:45			D.C.		
2:00			↓		
2:15			↓		
2:30			↓		

* initials of teachers

Figure 3 (cont'd)

INSTEP
Observation Schedule
Project 1
School 26

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30			B.P.	J.C.	J.C.
9:45			↓	↓	↓
10:00			↓	↓	↓
10:15			↓	↓	↓
10:30			↓	↓	↓
10:45	B.P.		D.M.	B.P.	D.M.
11:00	↓		↓	↓	↓
11:15	↓		↓	↓	↓
11:30	↓		↓	↓	↓
11:45	↓		↓	↓	↓
12:00	↓				
12:15	↓				
12:30	J.C.				
12:45	↓				
1:00	↓				
1:15	↓				
1:30	D.M.				
1:45	↓				
2:00	↓				
2:15	↓				
2:30	↓				

Figure 3 (cont'd)

INSTEP
Observation Schedule
Project 1
School 27

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30	H.K.		H.K.		
9:45	↓		↓		
10:00	↓		↓		
10:15	↓		↓		
10:30	K.H.		S.V.R.		
10:45	↓		↓		
11:00	↓		↓		
11:15	↓		↓		
11:30	S.V.R.				
11:45	↓				
12:00	↓				
12:15	↓				
12:30	↓	K.H.		K.H.	
12:45	↓	↓		↓	
1:00		↓		↓	
1:15		↓		↓	
1:30		H.K.		S.V.R.	
1:45		↓		↓	
2:00		↓		↓	
2:15		↓		↓	
2:30		↓		↓	

loss of data for nearly one month of the project.

The DATAMYTES, however, resulted in a much greater loss of data. As best we can estimate from available records, in excess of 272 observation sessions were carried out by observers using the DATAMYTES; of this number, only 142 provided useable data. In addition, a fair number of sessions were missed because the DATAMYTE went dead or the cassette tape was jammed.

The bad sessions, as best we can assess, were due to observer problems in use of the DATAMYTE (such as the volume being set too low), bad tapes, and unidentified machine malfunctions. The greatest difficulty was by far observer problems (two observers account for 91 of the 120 sessions that data was lost for); thus, it is estimated that 49 of the sessions were probably due to machine or tape malfunctions.

In this project, data were transferred from the PDP-12 computer to the larger CDC-6600 for analysis. The implementation of this new system caused a delay in the processing of the data which was collected. This delay in getting feedback from the data collected caused considerably difficulty in assessing reliability and determining data collection problems. More importantly, there was a delay in the feedback of the information to the teacher who was to preceive the interventions. The implementation of the interventions phase of the project was thus delayed approximately six weeks, from March to mid-April. In addition, because of the difficulty in the analysis, the direct feedback of data which was originally planned had to be taped.

Procedure

The final design was modified considerably from the original plans. Essentially the design called for the following stages:

BASELINE	1) Collection of baseline observation data of identified teacher and student for at least one month.
DESIGN	2) Discussion of students problems with teachers, identification of previous intervention, history, etc.
	3) Feedback of baseline data to teacher and discussion of the data.
	4) Design of interventions by project staff.
	5) Discussion of interventions with teacher.
TREATMENT	6) Implementation of interventions.
	7) Data collection during treatment observation.

The design and treatment stages were to occur at several different times for different teachers and with at least two weeks between the first and second target student for each teacher.

Originally a time series analysis had been planned, but due to loss of data and excess variability of the data, this analysis was omitted.

Interventions. The intervention phase of the project involved a sequence of events that culminated in the implementation of interventions individually designed for the target population. The events included a review of the baseline data, selection of target behaviors for each child, teacher interviews, intervention planning, and implementation of individual intervention strategies. The procedures inherent in each phase were systematically and consistently implemented so that continuity existed between the project team and the teachers.

Review of Baseline Data. The intervention phase began with a sharing of the observational data that had been collected over an eight-week baseline period. The project staff divided into two teams and met individually with the teachers assigned to each team. Using the computer printouts, the team members and the teachers discussed the types of behaviors and specific behavioral patterns indicated by the observations of the two previously determined target children. After synthesizing the trends found in the data and comparing these behaviors to the initial behavioral checklists and the teachers' objectives for each child, a problem area (e.g., interactions, work habits, personal habits, etc.) was chosen for one of the two target children in each classroom. This procedure was repeated for the second child in each class after the intervention for the first child had been planned and discussed with the teachers.

To provide more detail to the explanation of the intervention phase and its components, the interactions with one teacher will be discussed at each level. For example, during the data review session Teacher A had several questions concerning the meaning of information obtained from the observations. She had originally stated that Student A was a very active and often disruptive child. Thus, her interest in the observation data was to isolate the circumstances that paralleled the student's disruptive behavior. The discussion of the data then focused upon those behaviors that related to disruptiveness with peers. This particular concentration was made because the observation data confirmed the teacher's perceptions related to the frequency of the child's interuptive actions directed toward his peers. As a result of the conference between the team members and Teacher A, the parameters had been determined that would be used to choose a specific target behavior for modification.

Selection of Target Behaviors. After determining the parameters of the behavior, it was necessary to focus upon one observable behavior as the target for intervention. This process involved further assessment of the child's interactions. Team members and teachers began this assessment by listing particular behaviors that attributed to the major problem area. After reviewing the list, the teachers chose the one behavior that appeared to be the cause of the problem behavior. This behavior then became the focal point of the remaining intervention phase.

In the case of Teacher A, it was found that the student's disruptiveness with peers took several forms. Student A would tease the other children in the class, wander around the room, and interrput their work by talking, yelling across the room, and interrupting conversations of others. It appeared to the teacher and staff that the majority of disruptions were caused by the student's talking at inappropriate times. Because this behavior could be observed and assessed through the observation system developed for the project, and because it appeared to be the major problem, it was chosen as the target for modification.

Teacher Interviews. Each teacher was systematically interviewed after the selection of the target beahvior for the first child. This enabled the staff to obtain a more thorough understanding of the child's functioning within the classroom. Before the teacher interviews, the total staff met to discuss the scope of the interview. It was decided that there was adequate data relating to the classroom interactions, but an inadequate amount of information concerning the positive attributes of the child, the milieu of the classroom, the behavioral change strategies that the teacher had previously utilized, and the teachers' total program objectives for each child. Thus, the interview was to be structured around these issues. It was felt by the staff as a whole that this type of teacher input would provide a multidimensional view of the child and the basis for an intervention strategy that was congruent with the child's school environment.

The interview with Teacher A began by focusing upon the attributes of Student A. By answering questions about what Student A enjoyed doing, where he enjoyed being, who he liked and did not like, and how he reacted to others, Teacher A was able to describe Student A in a way that highlighted his uniqueness and needs. Teacher A also described the types of interventions she had used. She had tried to implement a token system using points, varying and shortening tasks, intermitent reinforcement schedule, and a loss of privileges. She concluded that Student A was most responsive when he was interacting on a one-to-one level and had some free time. When asked about her objectives for Student A, she was able to detail long and short-range goals for the child. For example, two of the primary goals were to reduce the student's interrputive behavior and to increase the amount of concentration time he exhibited while working. Information about the classroom procedures — such as time schedules, instructional content and teaching techniques, the classroom guidelines, and the principal's concerns — was also received. In summary, the interview not only aided the staff in evaluating the impact of the classroom experience upon the target student, but it also established the boundaries to be recognized when designing the interventions. The boundaries of the intervention are, in essence, restrictions determined by policy or physical constraints (e.g., time scheduling, instructional materials, physical facilities, etc.).

Intervention Planning. Using a combination of the information gathered from the interviews, the observational data summary, and notes from classroom visits, the total project staff met to discuss and plan the interventions for the target children. Using a process similar to brainstorming, the staff generated various types of alternatives that focused upon the needs and problems of each particular child. The decision regarding which strategy would best apply to the staff's knowledge of the child and the factors inherent in each classroom was based upon a concensus of agreement among the staff. The facts accumulated for each child were the crux of the decision; however, the clinical and educational judgments of the staff interplayed in the final choice of an intervention strategy.

When discussing Teacher A and Student A, the staff concentrated upon the objective of reducing the student's talking at inappropriate times. By examining the structure of the classroom and the child's role in the classroom, it was decided that this problem was not related to one specific situation. The student's talking occurred at almost any time of the day, and the strategies the teacher had utilized in the past seemed ineffective because of this fact. It seemed difficult to isolate particular stimuli. Therefore, the staff deduced that the intervention strategy be child-centered and that the child have a major role in the behavior change process. Thus, it was concluded that the staff would recommend to the teacher various self-monitoring techniques for the child. For example, since it appeared as if Student A was not aware of how loudly or how often he talked, this would be the concentration area for monitoring. It was suggested that the student record the voices of all the children in the room, including his own, and try to distinguish the differences in the voices. Results of this process could make the child aware of his voice and when his loudness was much more intense than others. It was also recommended that the child be taught to record his talking behavior, using free time as a reward for the periods of time when the tally was below a teacher-specified level. The self-recording process was to be used in conjunction with discussions with Student A concerning the occurrence of his behaviors and the consequences of his actions. The discussion process was to be followed by having the student write a contract stipulating his responsibilities and the conseuqences he expected if he did not adhere to the contractual agreement.

The previous description is representative of the intervention-designed process utilized for the remainder of the target students. For each student the staff reviewed the interfacing of the possibile intervention and the classroom environment. The degree to which the interface was positive and realistic determined whether or not the intervention was suggested to the teachers. This decision was based upon the staff's perceptions of the school climate and conversations with the teachers during the collection of baseline data.

Implementation of Interventions. Preceding the team member meetings with the teacher to explain the strategies and rationale for each intervention, the staff organized the intervention information guidesheets to give to the teachers. This method was chosen because it would provide the teachers with an on-hands product to refer to when evaluating the effect of the intervention. A meeting was then scheduled with each teacher. At the meeting the aspects of the target behavior were reviewed and the rationale for the specific intervention was applied to the components and stimuli associated with the behavior. If it was necessary to instruct the teacher as to the methods associated with a particular strategy, it was also done at this time. During the conference the teachers were encouraged to ask questions about the chosen strategy and their role during the intervention phase. The teachers were also assured that contact with the staff would continue during their implementation of the intervention. This assurance seemed important to the teachers because it provided constant feedback on their application of the strategies. Following the discussion of the first target child, the teacher and team focused on the assessment of the target behavior of the second child. The process for designing the second intervention was then initiated for the second child. However, due to the closing of the school's semester, the implementation phase of the second child was not introduced even though the planning had been completed.

No training was required for Teacher A to implement the suggested intervention strategy. Therefore, the discussion of the strategy focused upon how the plans coordinated with the existing classroom structure and the behavioral strategies she was currently using. Teacher A was comfortable with the self-monitoring methods because she developed experiences to foster independence within the curriculum and she felt that this intervention strategy complemented her current philosophy. The materials required for the intervention were also discussed. It was found that the facilities were adequate for the activities required of Student A and the teacher.

CHAPTER V

Results

In total, 15 of the 16 original students and all eight teachers were maintained in the study until its conclusion in May, 1976; one student was expelled from school and thus had to be dropped from the study. Interventions were designed for all 15 students in the study (see Appendix F for a sample of the interventions). Interventions were implemented by the teachers for 13 of the 15 students.

As was indicated in the procedures section, the target behaviors were selected by the teachers with consultation from the project staff. In all, three different target behaviors were selected: cooperative with peer for seven students; cooperative with object for five students; and in-seat for three students.

The unit of analysis decided upon was the mean percent time the student engaged in the target behavior during each day for which there were observational data. The number of observation periods for any single day varied from one to three.

The mean percent time each student was engaged in the targeted behavior is plotted in Figures 4.1 to 4.15. The percent time students engaged in the targeted behaviors varied greatly, as can be seen in the figures.

The loss of data due to technical and coder problems described in the procedures sections, in addition to the high degree of variability in the data, made it impossible to use the time series analysis technique (Glass, Wilson & Gottman, 1975) which was initially planned.

In order to investigate whether there were significant differences among baseline, design and treatment phases, Chi Squares were run (See Table 1). The median for baseline was calculated and it provided the dividing point for the analysis.

Figure 4.1

Percent Time Pupil 1.1.1 Spent in Cooperative Behaviors Toward Peers

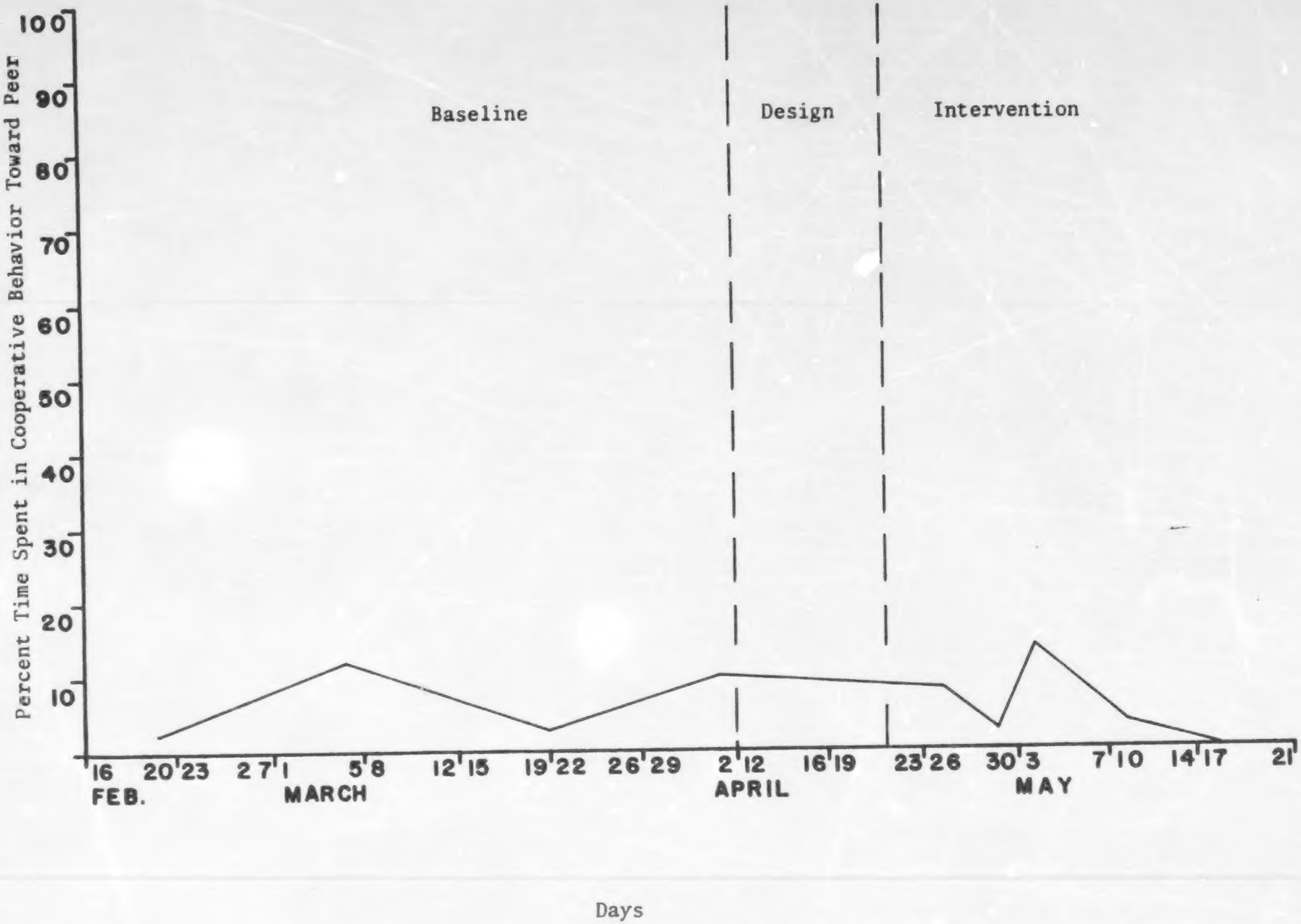


Figure 4.2

Percent Time Pupil 1.1.2 Spent in Cooperative Object Involvement

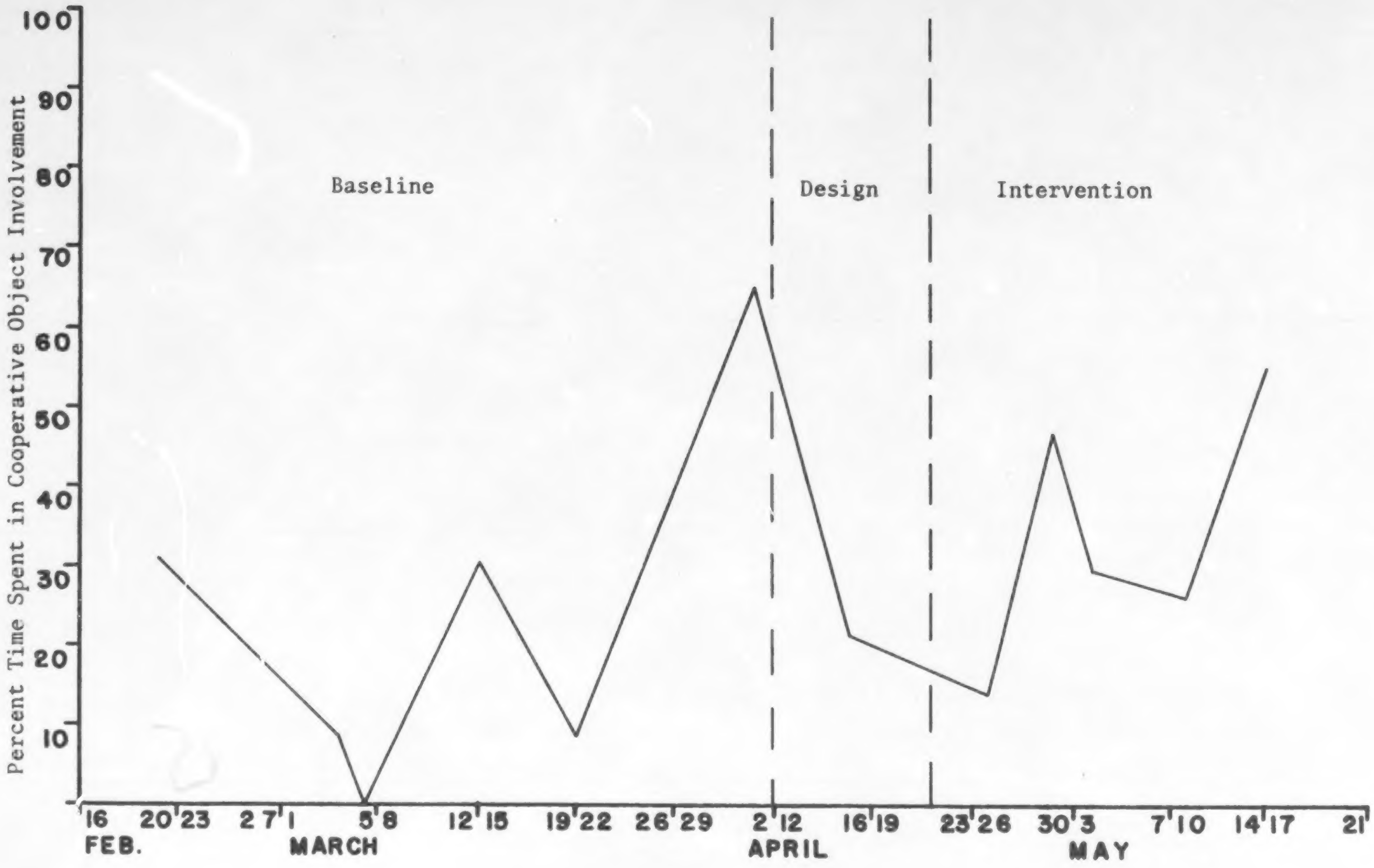


Figure 4.3

Percent Time Pupil 1.2.1 Spent in Cooperative Behavior Toward Peers

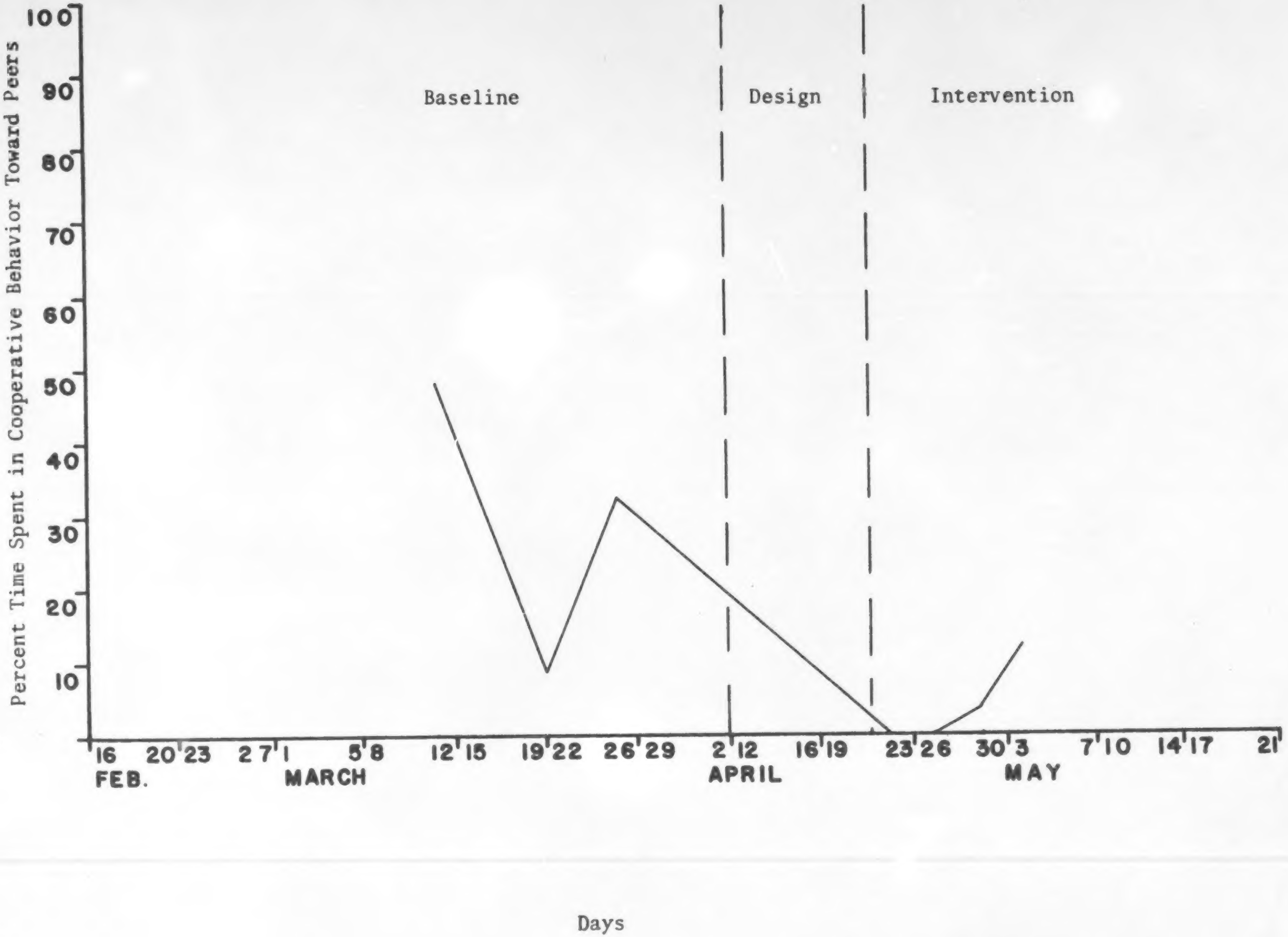


Figure 4.4

Percent Time Student 1.3.1 Spent in Cooperative Behavior Toward Peers

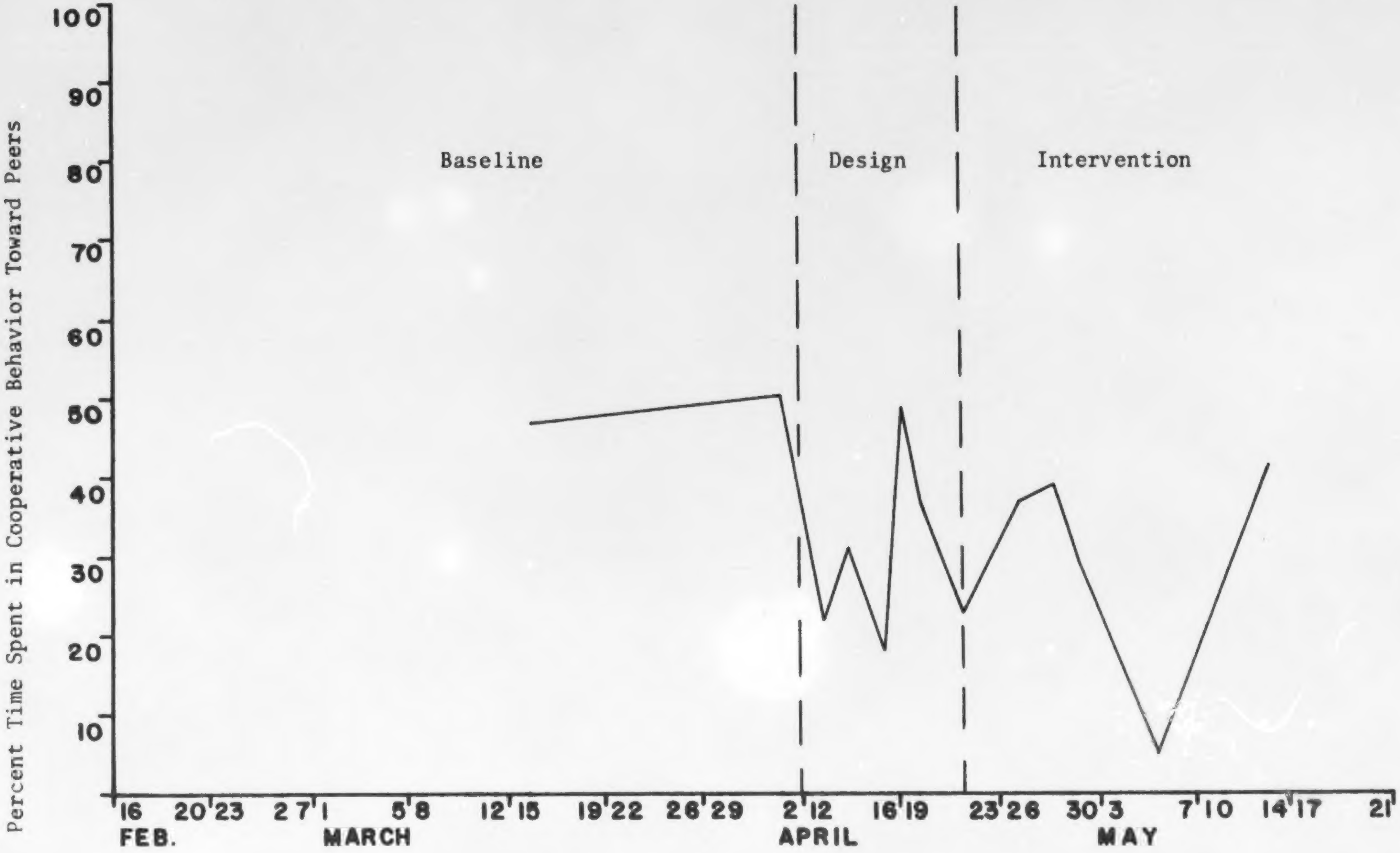


Figure 4.5

Percent Time Student 1.3.2 Spent in Cooperative Behavior Toward Peers

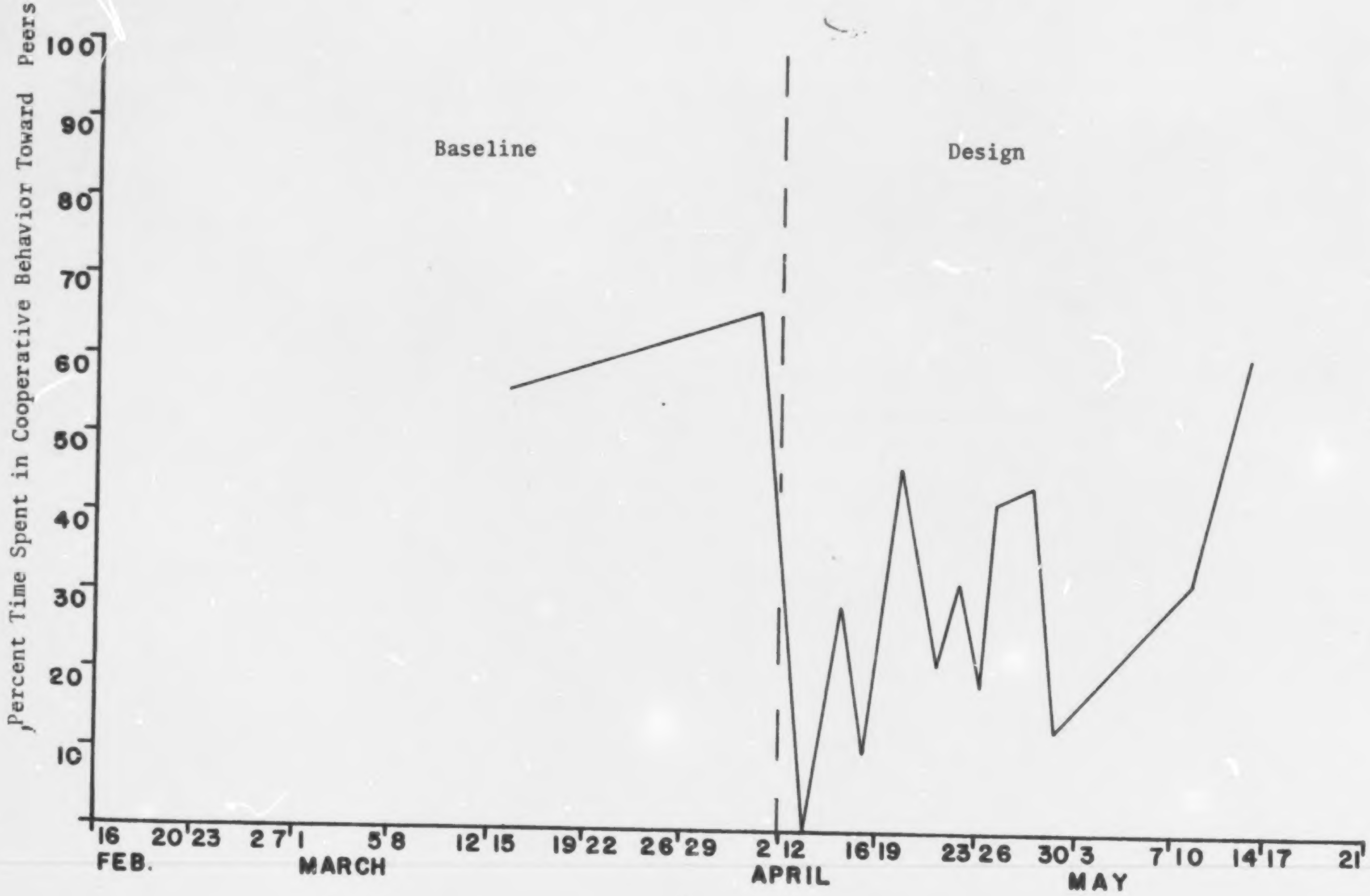


Figure 4.6

Percent Time Student 2.4.1 Spent in Cooperative Behavior Toward Peers

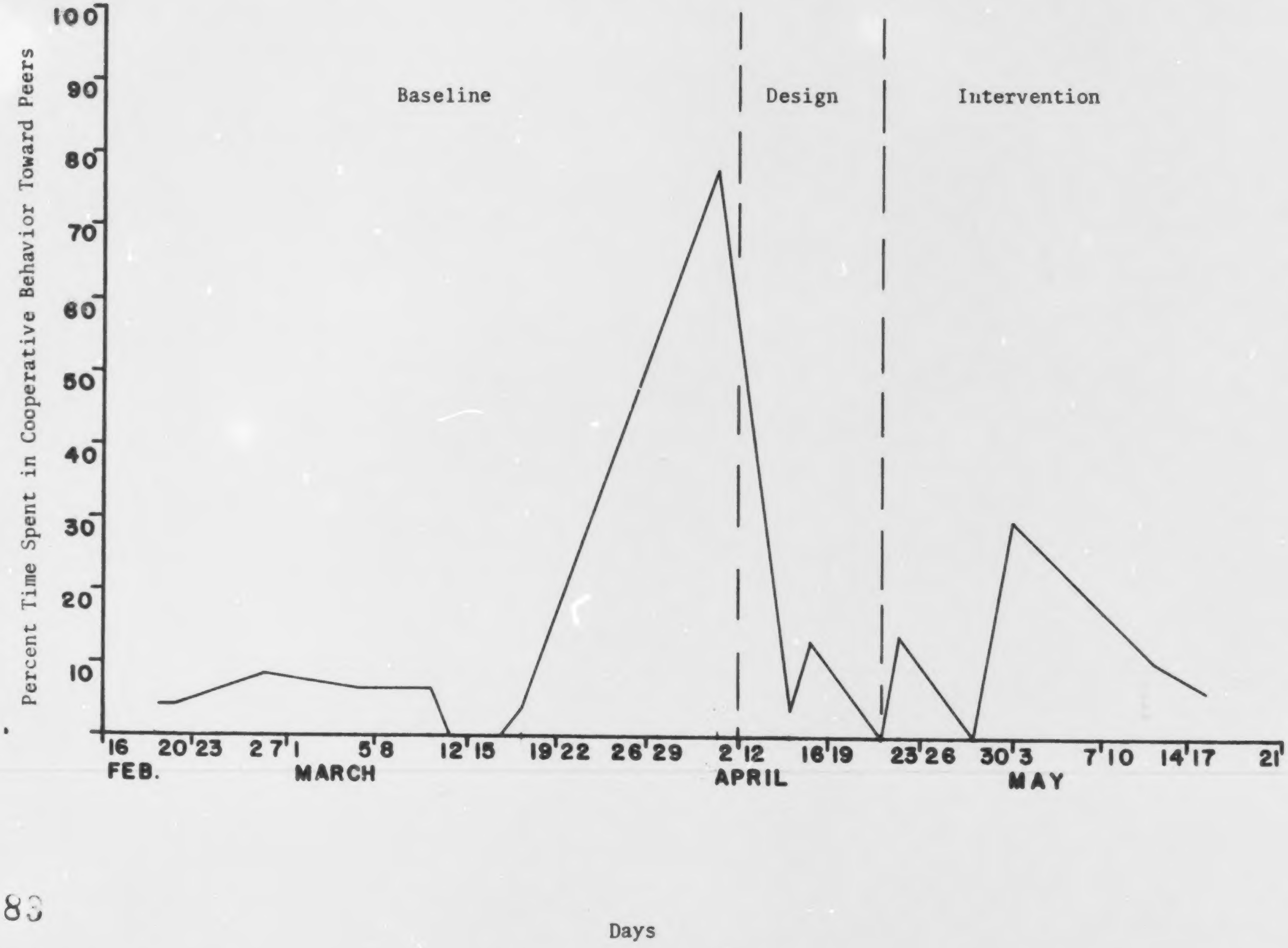


Figure 4.7

Percent Time Student 2.4.2 Spent in Seat

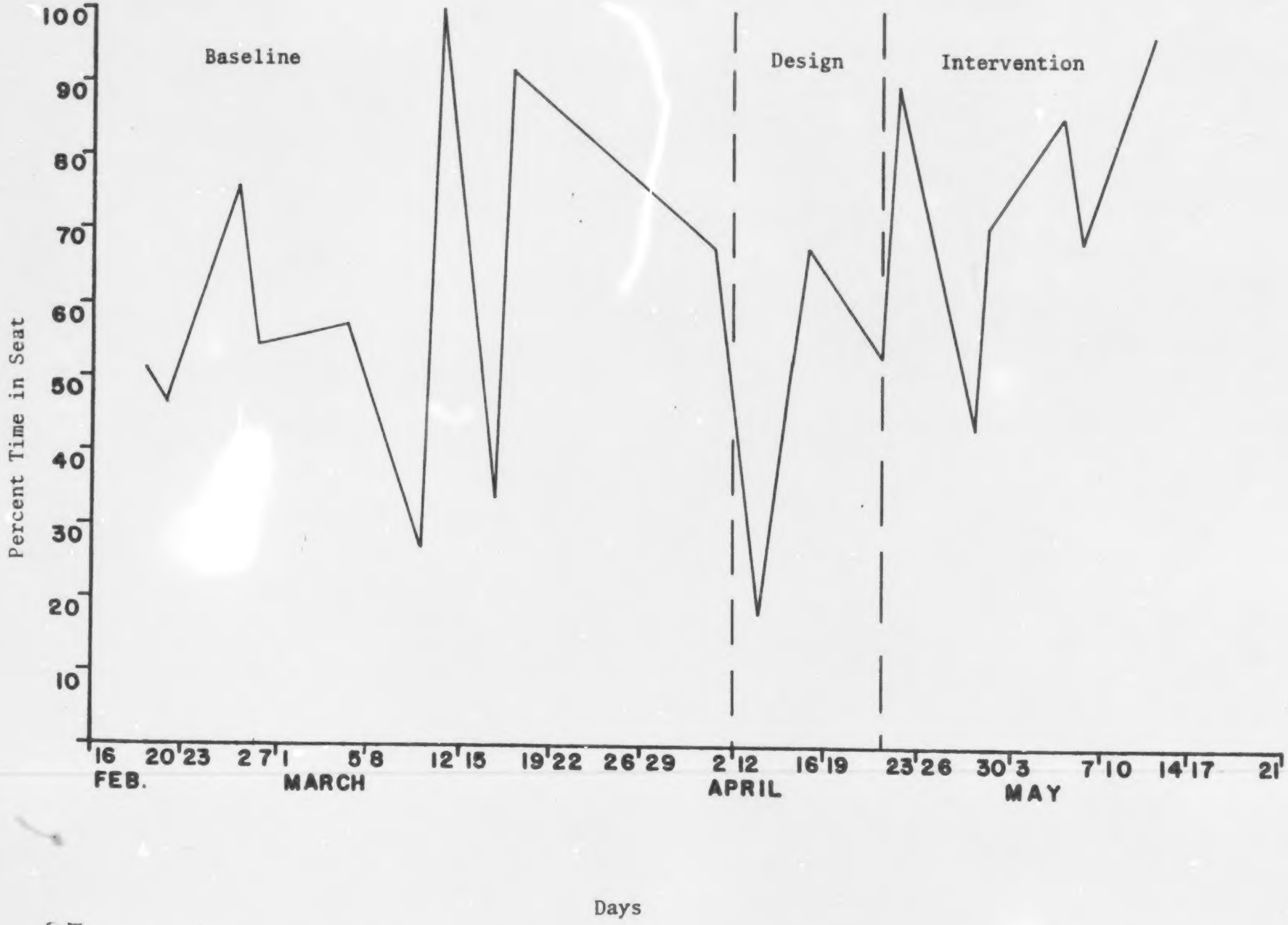
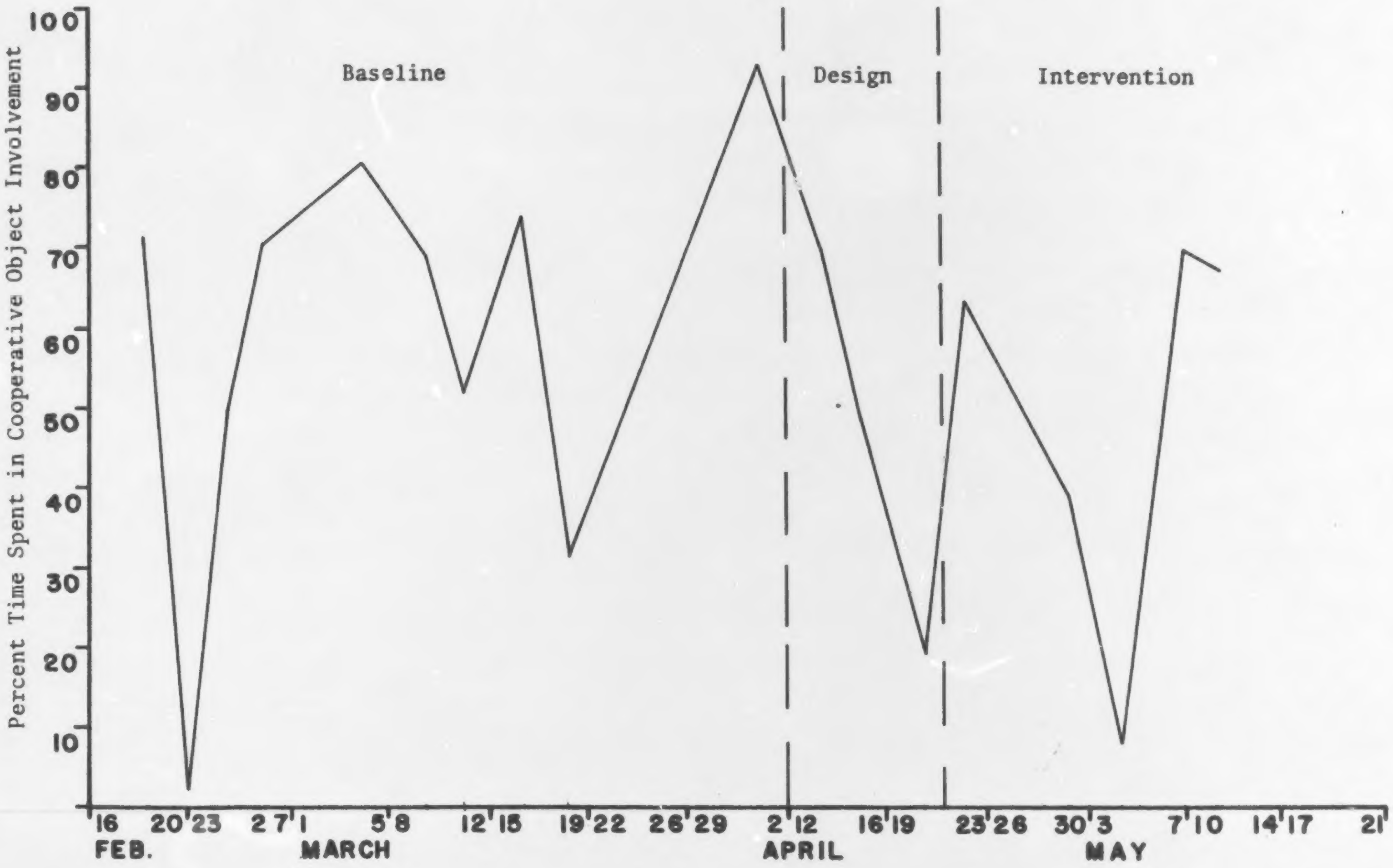


Figure 4.8

Percent Time Student 2.5.1 Spent in Cooperative Object Involvement



87

Days

Figure 4.9

Percent Time Student 5.1.2 Spent in Cooperative Behavior Toward Peers

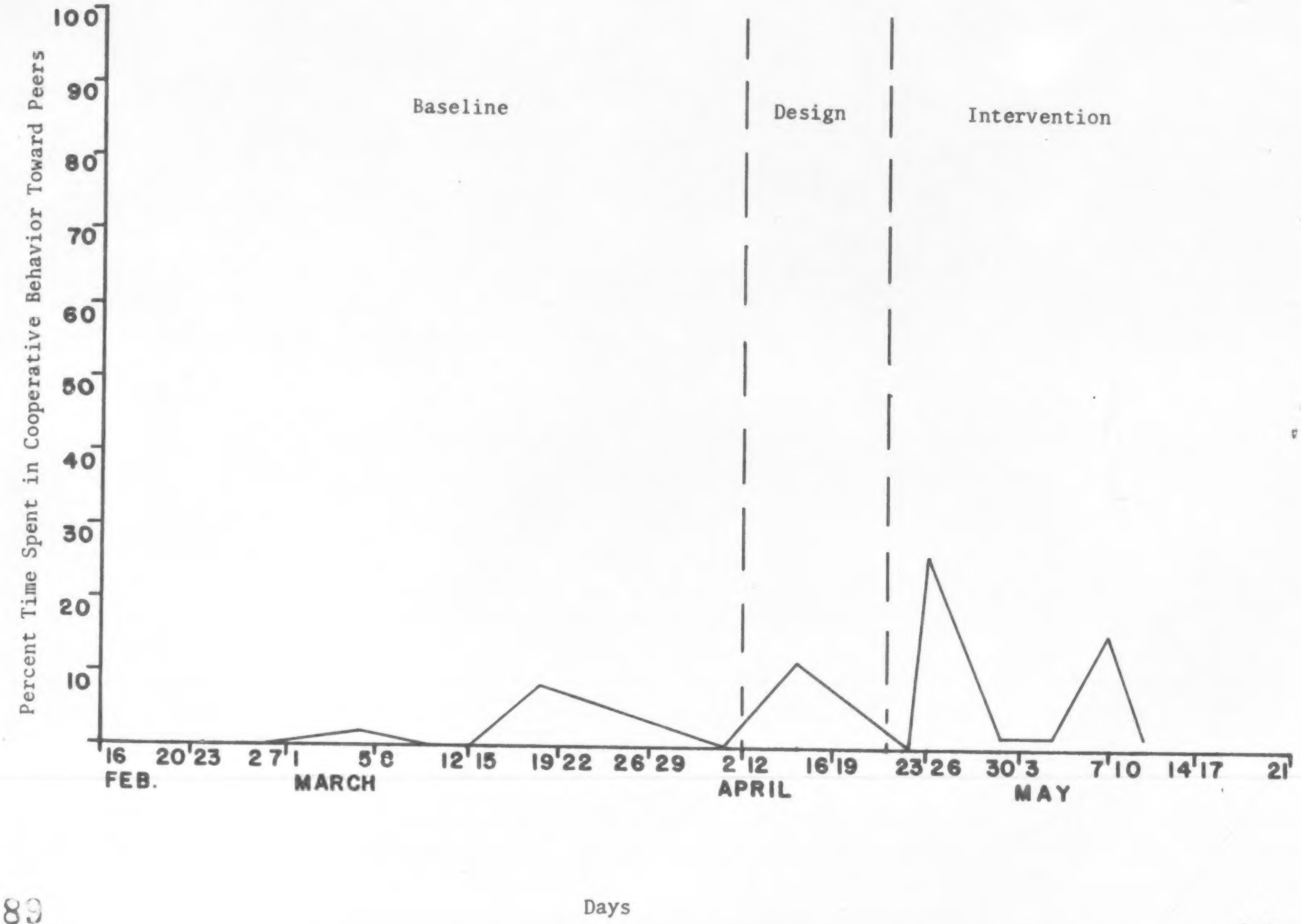
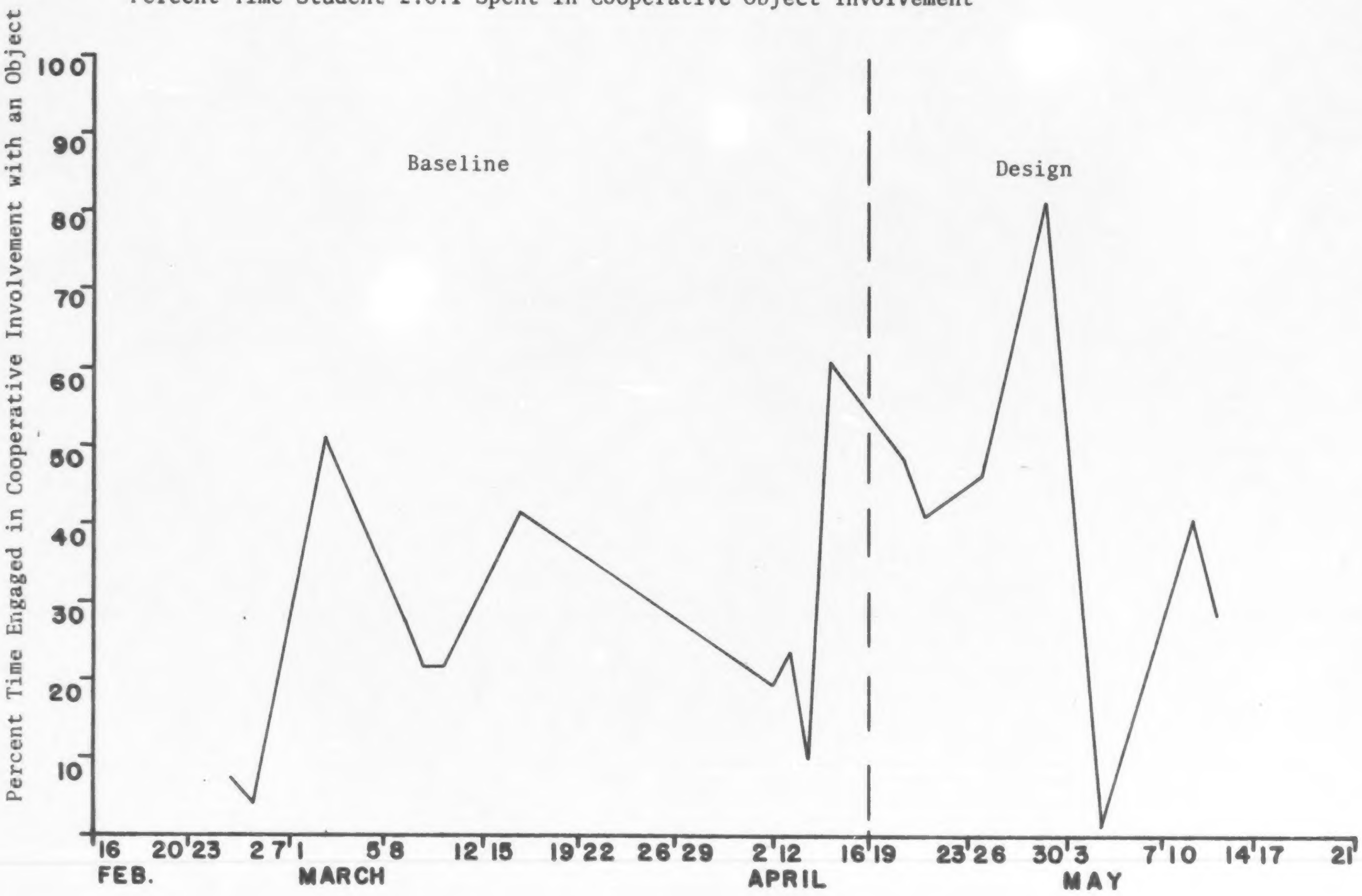


Figure 4.10

Percent Time Student 2.6.1 Spent in Cooperative Object Involvement



Days

Figure 4.11

Percent Time Student 2.6.2 Spent in Cooperative Involvement with an Object

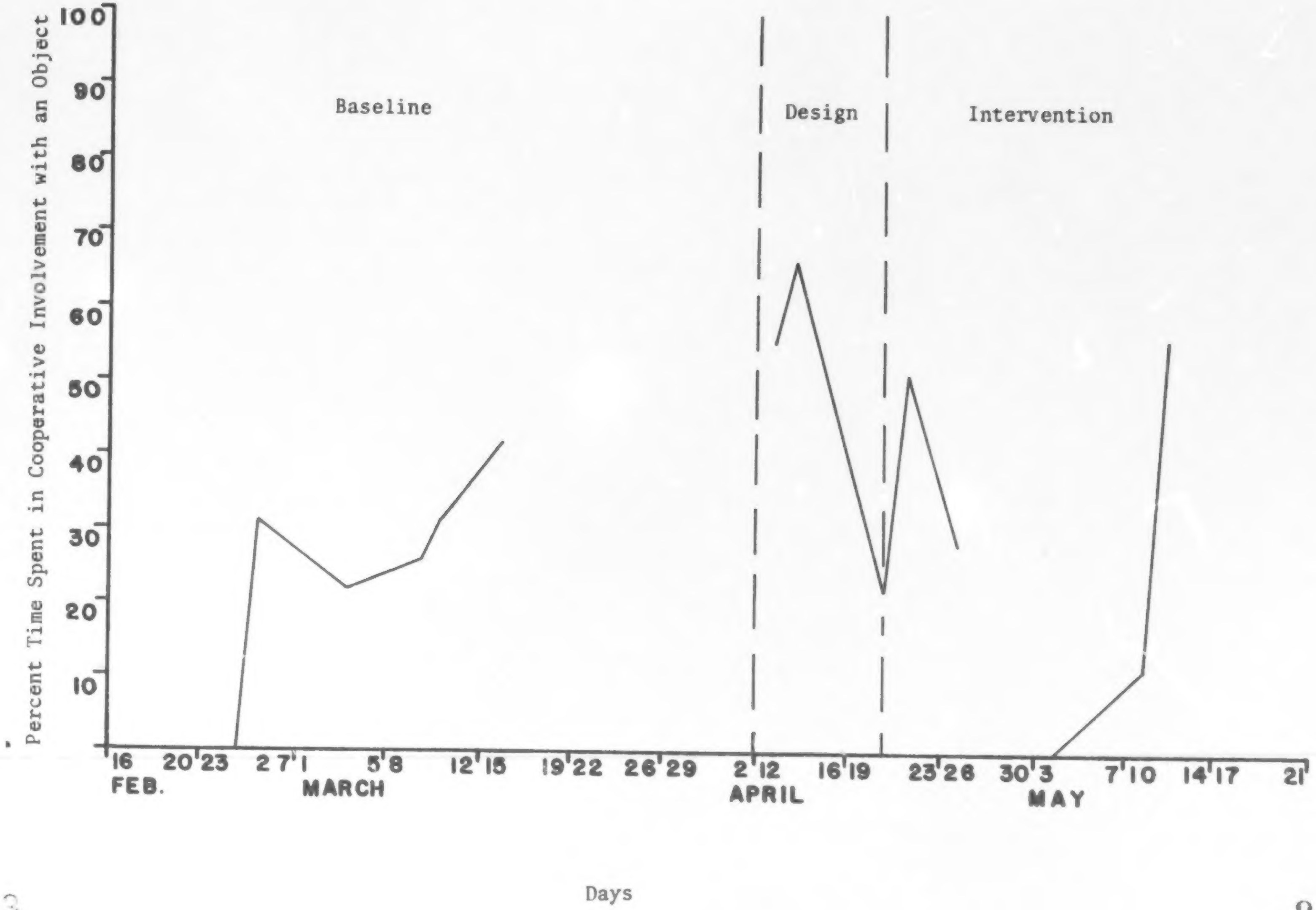


Figure 4.12

Percent Time Student 3.7.1 Spent in Cooperative Involvement with an Object

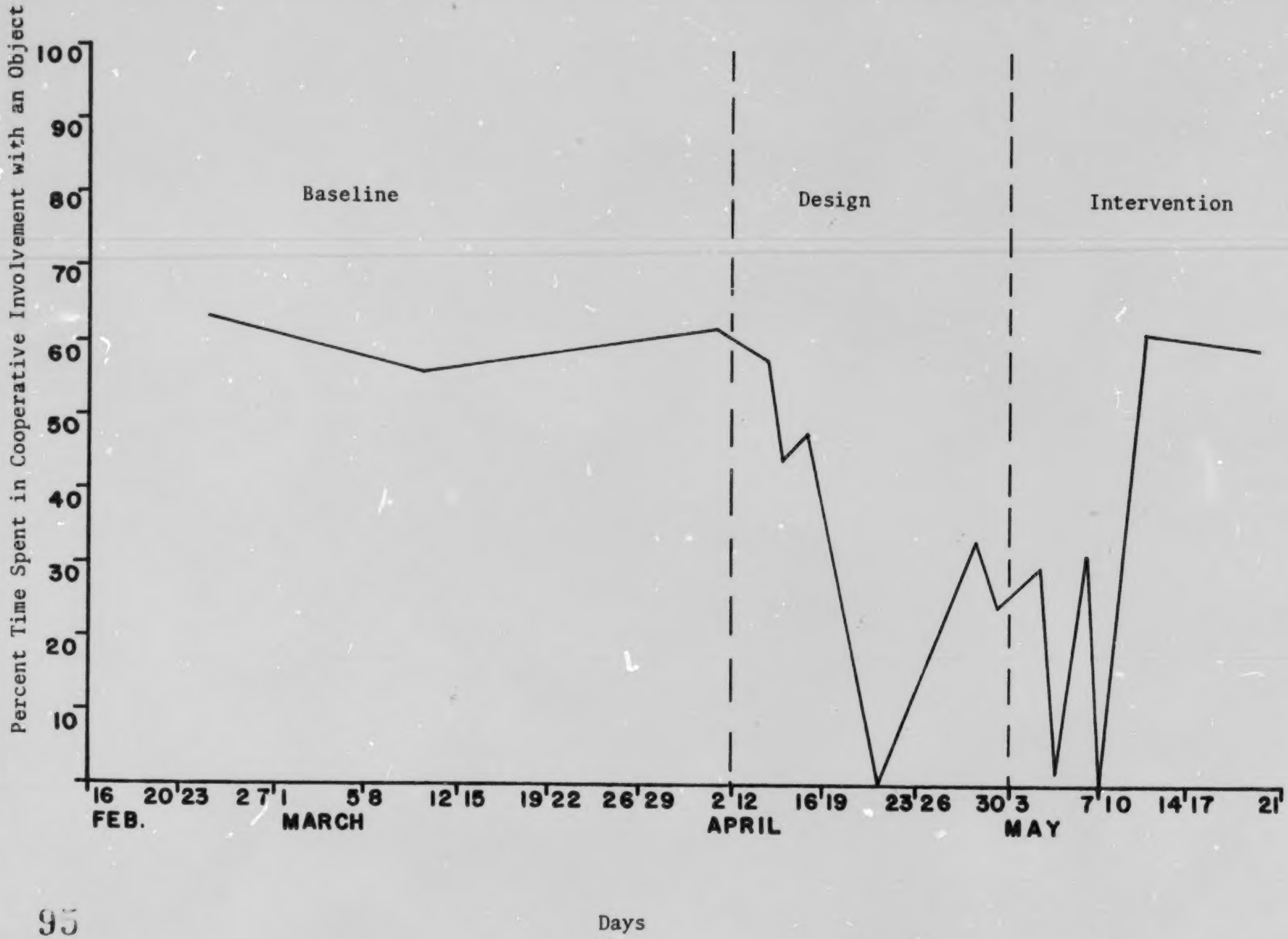


Figure 4.13

Percent Time Student 3.7.2 Spent in Cooperative Behavior Toward a Peer

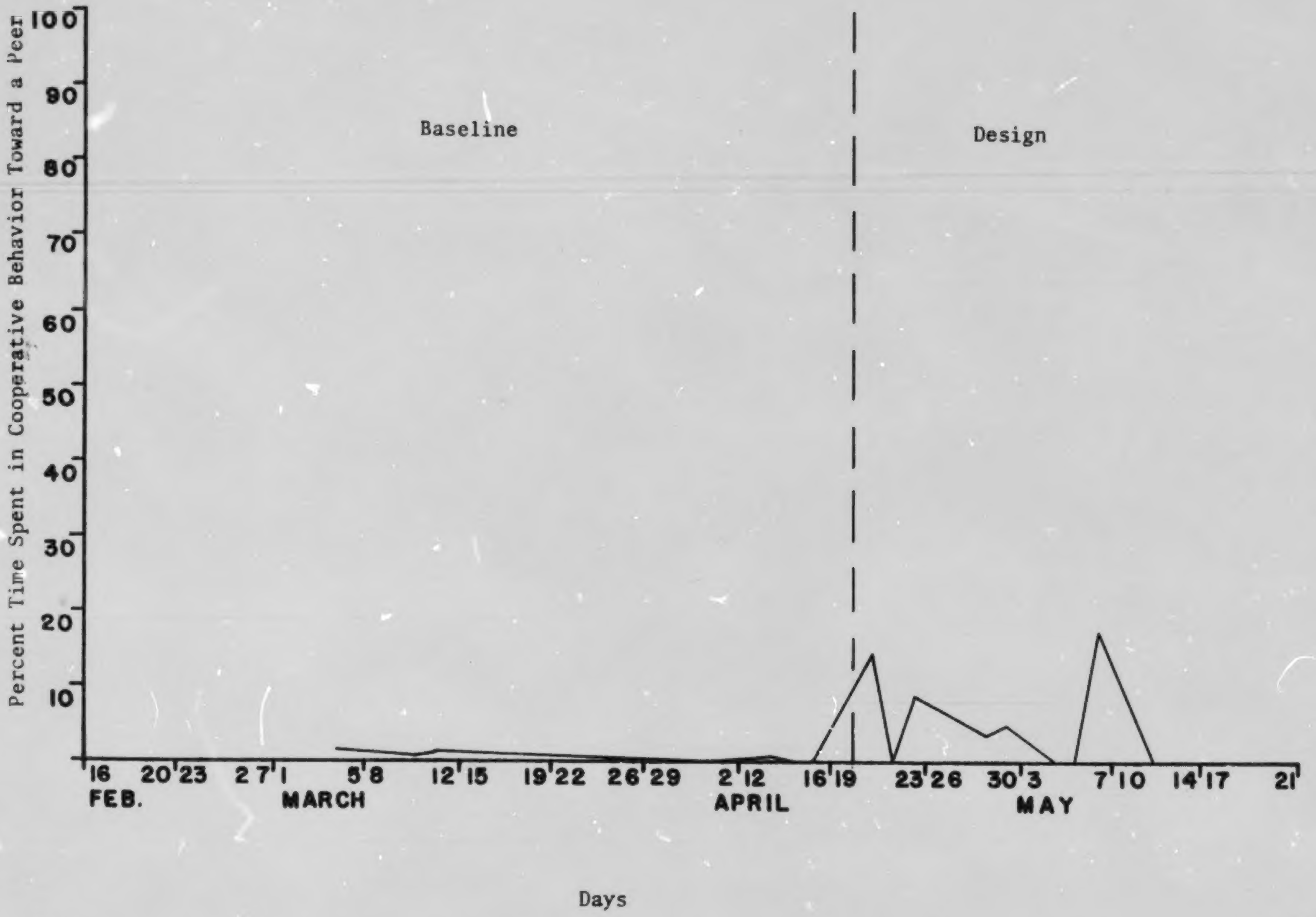


Figure 4.14

Percent Time Student 3.8.1 Spent in Seat

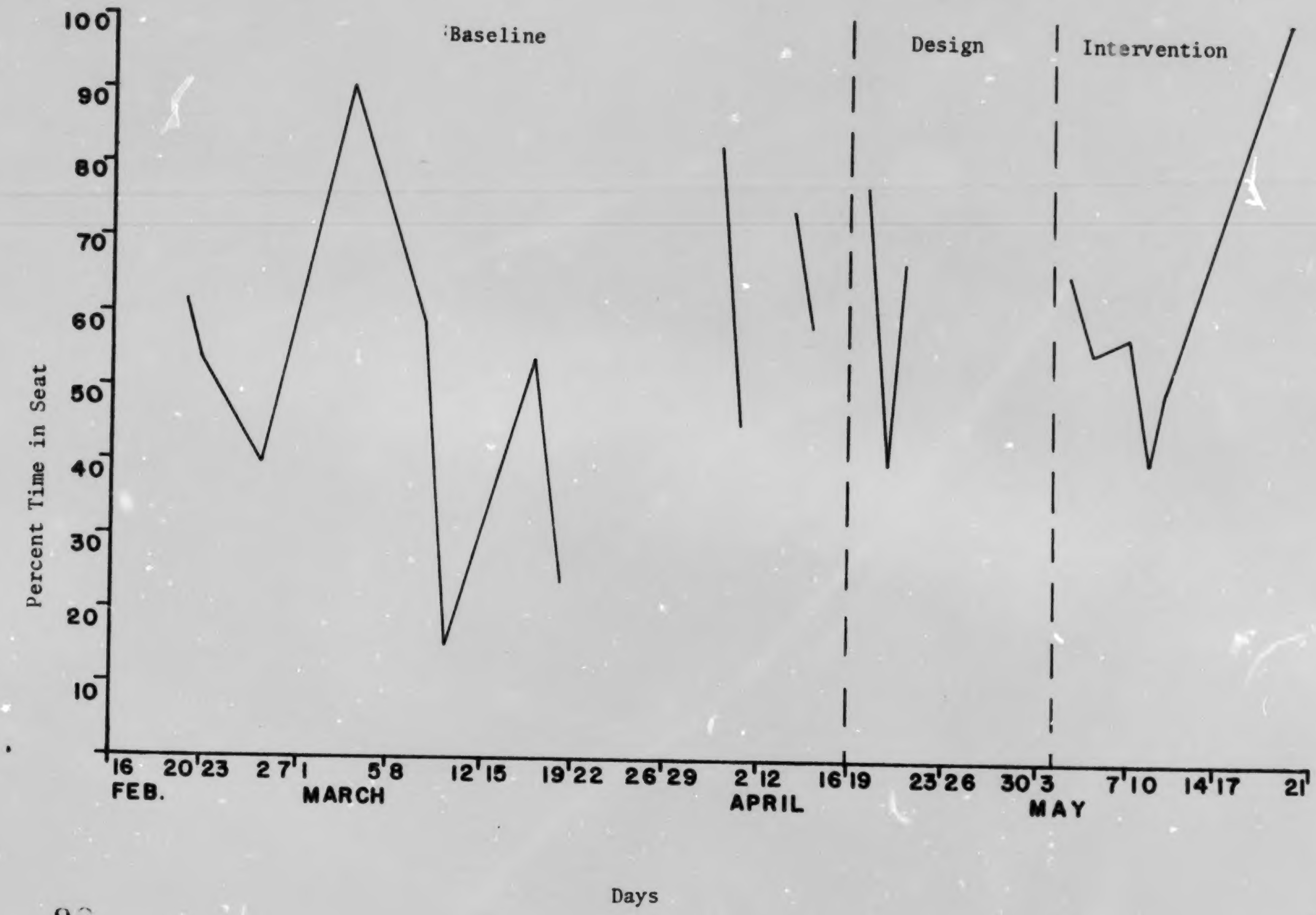
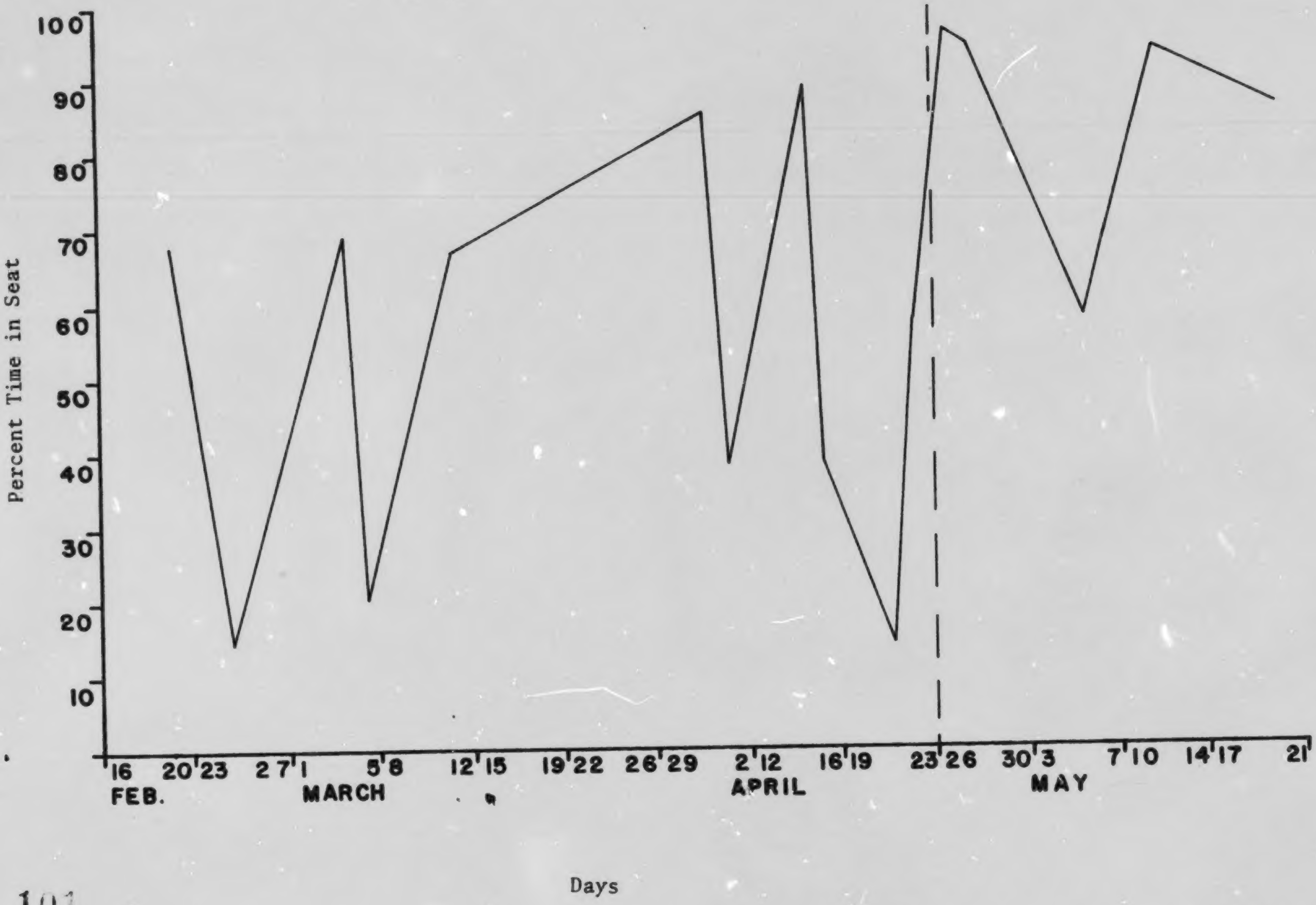


Figure 4.15

Percent Time Student 3.8.2 Spent in Seat



Based on this median, the expected frequencies for the design and treatment phases was that 50% of the data points would fall above this baseline median and 50% would fall below. Thus, a significant Chi Square would indicate a change in the target behavior during either design or treatment phases.

None of the 10 Chi Squares reached significance, as can be seen in Table 2. Thus it is concluded that no significant change in pupil behavior occurred as a result of the design or implementation of the intervention.

Table 1

Chi Squares Baseline - Design - Treatment

Using Baseline Median of Percent Time for Target Behaviors

School	Teacher	Pupil	Target Behavior	d.f.	Chi Square
1	1	1	Cooperative with Peer	1*	0.0
		2	Cooperative with Object	2	2.30
1	2	1	Cooperative with Peer	1*	2.30
1	3	1	Cooperative with Peer	2	.53
		2	Cooperative with Peer		No Intervention Implemented
2	4	1	Cooperative with Peer	2	1.24
2	4	2	In Seat	2	2.06
2	5	1	Cooperative with Object	2	.53
		2	Cooperative with Peer	2	3.46
2	6	1	Cooperative with Object		No Intervention Implemented
		2	Cooperative with Object	2	2.67
3	7	1	Cooperative with Object	2	3.83
		2	Cooperative with Peer		No Intervention Implemented
3	8	1	In Seat	2	0.0
		2	In Seat		No Intervention Implemented

*No Design Data Points; Comparison Between Baseline and Treatment only

Summary and Conclusions

Project INSTEP-I was undertaken for the purpose of developing a model inservice education program for public school personnel who work with children exhibiting moderate to severe behavioral difficulties. The proposal was stimulated by (a) projected trends of an increasing emphasis upon training public school personnel *in situ*, (b) demonstrated needs for more effective inservice training vehicles, and (c) increased mandated demands for public school services to the behaviorally disordered. Project INSTEP-I proposed further to capitalize upon recent developments in (a) performance-based child programs for behaviorally disordered children, (b) performance-based teacher preparation programs focused on behavior, (c) the application of computer technology to personnel preparation and (d) the application of instructional development technology. Two sets of closely interrelated activities comprised the project:

1. The specific development, implementation, and evaluation of innovation inservice training processes for public school teachers of the behaviorally disordered;
2. The training of teachers in a variety of intervention strategies designed to fit individual skill needs of teachers and pupils. Subsumed under these were the following specific activities;
    a. the assessment of teacher and student needs through teacher definition and systematic observation of classroom behavior;
    b. the utilization of delayed feedback to teachers through Computer-Assisted Teacher Training System (CATTS);

c. the development and evaluation of specific intervention strategies; and

d. the individualized program of training for each teacher.

The project was carried out with the active cooperation of the Indianapolis Public Schools and within the framework of Schools #26, #27 and #45. These schools were in close proximity to one another and had sufficient members of interested teacher participants. The principals of each school, in addition, had expressed active interest in supporting the objectives of the project.

A number of operational problems, mainly involving data collection, analysis and feedback, interfered with the effective piloting of the proposed inservice training model. Nonetheless, sufficient positive outcomes emerged to warrant recommendations for further piloting and development of field-based programming for teachers who work with the behaviorally disordered. A summary of key project outcomes and recommendations follows:

1. Field-based training is enhanced through processes which allow teacher definition of skill needs (for teachers and pupils).
2. Feedback to teachers is an important element of training; varied methods should be developed to account for and take advantage of local conditions.
3. The provision of computer-based feedback to teachers may not be feasible in distant locations without the availability of on-site terminals.
4. Teacher developed/adapted instructional materials have potential for use with behaviorally disordered children.
5. Availability of academic credit is an important incentive for effective teacher participation.

It is apparent, too, that an overall benefit can be derived from the training process of continuous, on-site activity in behalf of teachers and their students.

The project goals did not include an effort to assess these variables; there was general agreement among participants, however, that the types of training and intervention processes undertaken were valuable and useful alternative methods for knowledge and skill-building. Our consensus is that extended efforts should be undertaken by training institutions to develop effective, field-based training options for experienced teachers.

APPENDIX A

Case Report on Problem Behaviors

CASE REPORT ON
PROBLEM BEHAVIORS

Person completing report ______________________________

Name of student ______________________________

Age of student ____________ Sex of student ____________

Problem Behavior	Frequency of Occurrence
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

APPENDIX B

Master List of Problem Behaviors of Emotionally Disturbed Students and Socio-Behavioral Skills

Name ______________________

MASTER LIST OF PROBLEM BEHAVIORS OF EMOTIONALLY DISTURBED STUDENTS

The Student:

Behavior	Should Include	Should Clarify Statement	Should Not Include
1. physically hurts others			
2. disrupts class			
3. breaks rules			
4. fights			
5. does not follow directions			
6. quarrels			
7. throws temper tantrums			
8. is inattentive			
9. shows off			
10. swears			
11. is destructive			
12. bullies other students			
13. is boisterous			
14. does not cooperate			
15. is defiant			
16. steals			
17. lies			
18. destroys property of others			
19. sets fires			
20. threatens classmates			
21. yells in class			
22. gets out of seat constantly			

	Behavior	Should Include	Should Clarify Statement	Should Not Include
The Student:	23. does not share materials			
	24. blames others			
	25. teases others with malice			
	26. negatively demands			
	27. interrupts, cuts off others speech			
	28. interrupts, cuts off others activities			
	29. glares, makes faces			
	30. is self-conscious			
	31. is withdrawn			
	32. is shy			
	33. is timid			
	34. is fearful			
	36. is reluctant			
	37. is easily flustered			
	38. lacks self-confidence			
	39. cries easily			
	40. is nervous			
	41. is constantly confused			
	42. looks depressed most of the time			
	43. refuses to talk			
	44. does not play with classmates			
	45. expresses feelings of inferiority			
	46. avoids contact with others			
	47. is easily upset by change			
	48. keeps to self			
	49. has short attention span			

	Behavior	Should Include	Should Clarify Statement	Should Not Include
The Student:	50. is easily distracted			
	51. is tense			
	52. is inattentive			
	53. is not interested in most activities			
	54. is generally apathetic			
	55. does not participate in classroom activities			
	56. "flits" from one activity to another			
	57. does not complete activities			
	58.			
	59.			
	60.			
	61.			
	62.			
	63.			
	64.			
	65.			
	66.			
	67.			
	68.			
	69.			
	70.			
	71.			
	72.			
	73.			
	74.			

	Behavior	Should Include	Should Include Statement	Should Not Include
The Student:	75.			
	76.			
	77.			
	78.			
	79.			
	80.			
	81.			
	82.			
	83.			
	84.			
	85.			
	86.			
	87.			
	89.			
	90.			
	91.			
	92.			
	93.			
	94.			
	95.			
	96.			
	97.			
	98.			
	99.			
	100.			

MASTER LIST OF SOCIO-BEHAVIORAL SKILLS FOR STUDENTS TO MASTER

The Student:

	Behavior	Should Include	Should Clarify Statement	Should Not Include
1.	helps others physically			
2.	participates in classroom activities			
3.	follows classroom rules			
4.	plays with others with little supervision necessary			
5.	follows directions			
6.	praises others, supports other's ideas			
7.	controls temper			
8.	listens attentively			
9.	expresses pride in activities			
10.	uses nonabusive language to express feelings			
11.	constructively uses materials			
12.	asks for cooperation from other students			
13.	engages in classroom activities w/o making disruptive noises			
14.	cooperates with others' suggestions			
15.	complies readily to reasonable requests			
16.	uses others' property only after receiving permission			
17.	accurately relates information			
18.	uses property of others without damaging them			
19.				
20.	positively offers suggestions to classmates			
21.	speaks without yelling			
22.	stays in seat when doing seat work			
23.	shares materials when asked			

The Student:

	Behavior	Should Include	Should Clarify Statement	Should Not Include
24.	accepts responsibility for own activities			
25.	openly expresses feelings toward others			
26.	cooperatively makes requests			
27.	waits turn before speaking			
28.	asks politely to be included in others' activities			
29.	initiates conversation with others			
30.	is confident			
31.	responds to conversation of others			
32.	is sociable with others			
33.	boldly takes on activities			
34.	expresses preferences, opinions, etc			
35.				
36.	eagerly engages in activities			
37.	persists in activities despite distractions			
38.	is confident about ability			
39.	expresses appropriate emotions			
40.	seems at ease with self			
41.	knows what he is doing most of the time			
42.	looks happy most of the time, smiles, laughs			
43.	responds verbally to others			
44.	plays with other classmates			
45.	expresses feelings of self-satisfaction			
46.	initiates conversation with others			
47.	adapts easily to new situations			
48.	talks with others			

	Behavior	Should Include	Should Clarify Statement	Should Not Include
The Student:	49. focuses on one task until complete			
	50. attends to activity at hand rather than distractions			
	51. appears calm			
	52. attends to conversation, activity, etc.			
	53. is interested in many alternative activities			
	54. quickly chooses among alternative activities			
	55. participates in classroom activity			
	56. works on activity until completed or requested to stop			
	57. completes activities			
	58.			
	59.			
	60.			
	61.			
	62.			
	63.			
	64.			
	65.			
	66.			
	67.			
	68.			
	69.			
	70.			
	71.			
	72.			
	73.			

	Behavior	Should Include	Should Clarify Statement	Should Not Include
The Student:	74.			
	75.			
	76.			
	77.			
	78.			
	79.			
	80.			
	81.			
	82.			
	83.			
	84.			
	85.			
	86.			
	87.			
	88.			
	89.			
	90.			
	91.			
	92.			
	93.			
	94.			
	95.			
	96.			
	97.			
	98.			
	99.			
	100.			

APPENDIX C

Goals and Objectives for Emotionally Disturbed Students

GOALS AND OBJECTIVES FOR
EMOTIONALLY DISTURBED STUDENTS

Name ____

Goals

1. ____

____

2. ____

____

Objectives

1. ____

____

2. ____

____

3. ____

____

4. ____

____

5. ____

____

APPENDIX D

Goals of Teachers of the Indianapolis Public Schools Program for Emotionally Disturbed Students

Goals of Teachers of the Indianapolis Public Schools Program for Emotionally Disturbed Students

1. To help the students know themselves, develop an acceptance and liking of themselves, understand reasons for their behavior, and accept responsibility for their actions.
2. To help students learn to express their feelings, both positive and negative, in ways that are socially acceptable to others.
3. To help students learn to accept others' expressions of feelings, both positive and negative.
4. To help the students develop a respect of the worth, rights and property of others.
5. To help the students develop a cooperative mode of interaction with peers that will best meet their needs and the needs of others.
6. To help the students develop a cooperative mode of interaction with teachers and other authority figures which leads to their meeting their own needs.
7. To help students actively participate in classroom activities in a manner that does not disrupt the activities of others.
8. To help students work effectively and successfully on classroom tasks.
9. To help the students adapt and feel comfortable in most new situations.

Goal 1

Knows, Accepts, and Likes Self

Socio-Behavioral Skills

1. expresses feelings of self-satisfaction
2. looks happy frequently, smiles, laughs
3. seems at ease with self
4. likes self as a person
5. expresses pride in own abilities
6. realistically appraises own abilities
7. probes inner feelings when upset
8. knows what he is doing most of the time
9. can make own decisions
10. accepts responsibility for own actions
11. feels successful, says he is successful

Problem Indicators

1. is self-conscious
2. is easily flustered
3. lacks self-confidence
4. is nervous
5. looks depressed most of the time
6. expresses feelings of inferiority
7. refuses to accept responsibility for own actions
8. never stands up for own rights, beliefs

Goal 2

Expresses Feelings in a Socially Acceptable Way

Socio-Behavioral Skills	Problem Indicators
1. expresses preferences, ideas opinions, etc.	1. is extremely shy, timid
2. openly expresses feelings appropriately towards others	2. is tense
3. shows affection by hugging, touching	3. is extremely passive
4. shows sympathy towards others	4. cries easily
5. expresses feelings of disagreement with ease	5. lies
6. shows anger or hurt with appropriate control	6. is destructive
7. uses nonabusive language to express feelings	7. yells in class
8. speaks without yelling	8. is unpredictable, has inconsistent blow-ups
9. controls temper	9. throws temper tantrums
	10. fantasizes
	11. masturbates openly
	12. swears and uses abusive language

Goal 3

Accepts Others' Expressions of Feelings, Ideas, etc.

Socio-Behavioral Skill	Problem Indicators
1. accepts realistic praise from others	1. rejects positive feelings of peers, teachers
2. accepts feelings of others	2. refuses to accept criticism
3. accepts constructive criticism	3. interrupts expression of other's feelings
4. accepts or tolerates views of teacher and peers	4. withdraws from physical expression of affection
5. accepts help from teacher and peers	

Goal 4

Respects Rights and Property of Others

Socio-Behavioral Skills	Problem Behaviors
1. uses others property only after receiving permission	1. steals
2. uses property of others without damaging it	2. destroys property of others
3. constructively uses materials	3. interrupts, cuts off other's speech
4. respects other people's worth	4. interrupts, cuts off other's activities
5. respects rights of others by waiting turns (in line, when speaking, allows others turns)	5. sets fires
6. respects other people freedom of expression	6. refuses to recognize others' point of view
7. accepts or tolerates other's needs that are different from their own	

Goal 5

Cooperatively Interacts with Peers

Socio-Behavioral Skills

1. responds verbally to classmates
2. is sociable with peers (talks with peers)
3. positively offers suggestions to peers
4. politely makes requests of peers
5. asks for cooperation from classmates
6. praises others ideas
7. shares materials when asked
8. plays with peers
9. asks politely to be included in other's activities
10. asserts own needs and rights

Problem Indicators

1. glares, makes faces
2. tells false stories about classmates
3. does not share materials
4. blames classmates
5. teases with malice
6. swears and uses abusive language
7. bullies other students
8. fights
9. physically hurts others
10. threatens other students
11. attacks other students
12. causes others to attack him
13. avoids contact with others, keeps to self
14. instigates fights between other students
15. tattles on other students
16. never stands up for rights, ideas, beliefs
17. seeks punishment from others

Goal 6

Cooperatively Interacts with Teacher

Socio-Behavioral Skill	Problem Indicator
1. cooperates with teacher's suggestions	1. does not cooperate
2. complies readily to reasonable requests	2. is defiant
3. can handle outside authority	3. uses abusive language
4. accepts leadership in games and classroom	4. ignores the teacher
5. responds verbally to teacher questions	5. hits the teacher

Goal 7

Cooperatively Participates in Classroom Acitivities

Socio-Behavioral Skills	Problem Indicators
1. listens attentively	1. has short attention span
2. attends to conversation, activity, etc.	2. is inattentive
3. follows directions	3. does not follow directions
4. follows classroom rules	4. breaks rules
5. waits turn before speaking	5. flits from one activity to another -- does not finish activity
6. engages in activity without making noises	6. is not interested in most activities
7. participates in activity	
8. can compromise	
9. follows daily routine of class successfully	

Goal 8

Works Effectively on Classroom Tasks

Socio-Behavioral Skills	Problem Indicators
1. stays in seat when doing seat work	1. refuses to do work
2. focuses on task at hand and ignores distractions	2. asks irrelevant questions
3. works on activity until completed or requested to stop	3. gets out of seat constantly
4. completes activities	4. is easily distracted
5. changes to next activity on own when finished with last activity	5. refuses to complete work
6. works well in unstructured activity	6. runs out of room
7. works to best of ability	7. leaves building
	8. plays hooky
	9. constantly does not accomplish work in reasonable time
	10. guesses rather than thinks through correct answers
	11. short attention to task at hand
	12. needs constant reassurance and reward from teacher

Goal 9

Adapts Readily to New Situations

Socio-Behavioral Skill	Problem Indicators
1. adapts readily to new situations	1. is easily upset by changes
2. adjusts to temporary changes in expectations, rules, enviornment	2. disoriented, is constantly confused
3. thinks through problem situations	3. has difficulty getting started
4. attempts new material and activities with confidence, motivation	
5. initiates and follows through on new ideas	
6. easily makes new friends	

APPENDIX E

Socio-Behavioral Interaction System (SIS)

Observer's Reference Manual

Socio-Behavioral Interaction System (SIS)

Observer's Reference Manual

Adapted by: Keith Brownsmith
Penny Eldred

From: Systematic Observation
System for BOCES: Observer's
Reference Manual

This observation system has been developed for teachers in the Indianapolis Public School System and is based on their expressed needs. Stemming from earlier discussions with Indianapolis Public School personnel and in conjunction with what is estimated to be reasonable for an observation system, the following categories of pupil, teacher and peer behavior have been identified.

PUPIL BEHAVIOR

Social Interaction (with peers, adults)

--Cooperative/Neutral

--Uncooperative

Individual Involvement (with self, object)

--Cooperative

--Uncooperative

Index of Pupil Attention (this is not directly coded, but derived)

TEACHER BEHAVIOR

Approval/Acceptance of Pupil Behavior

Neutral Reaction to Pupil Behavior

Disapproval/Unacceptance of Pupil Behavior

Non-interaction with Pupil

PEER BEHAVIOR

Cooperative Reaction to Pupil Behavior

Uncooperative Reaction to Pupil Behavior

These categoreis of behavior are intentionally broad in order to keep the system rather simple. Simplicity will make observer training easier, actual observation more feasible, and teacher feedback more understandable.

While the frequency, duration, and sequence of teacher and pupil behavior can be maintained with this category system, specific description of what actually occurs is limited. Therefore, a sign system has been developed to be used in a complementary manner with the category system. The sign system includes specific descriptions of pupil and teacher behavior. It is suggested that the sign system be employed at 10-minute intervals. At the end of each interval an observer checks off whether or not each of the behaviors occurred at least once during that interval. Thus, interpretation of information in the category system can be facilitated by the more specific sign system descriptions.

In addition, information relative to the nature of activity, who initiates an activity (i.e., self, peer, adult), and the nature of pupil movement within classroom areas will be recorded. This information is collectively termed "situational information."

With this type of observation technique only one pupil should be tracked by an observer at a time. The specific pupil being tracked at any given time will be called the "Select Pupil."

Following is the observer's training manual which includes the general category system (pupil, teacher, and peer behavior), the two situational categories, the sign system, directions for use of TOUCH-TONE telephones and DATAMYTES, and a practice coding script.

Observer's Training Manual

Introduction

The primary concern with target pupil behavior is whether or not the select pupil is acting harmoniously or cooperatively with his immediate environment, which includes adults, peers, objects and the select pupil himself. Thus, pupil behavior has been dichotomized into (01) cooperative and (02) uncooperative categories. Further interest in how the teacher and other pupils are acting toward the select pupil directly can be documented. The teacher can be (03) overtly approving or accepting the pupil's actions, (04) acting neutrally toward him, or (05) overtly disapproving or not accepting his actions. Peers can be exhibiting (06) a cooperative/neutral reaction to the select pupil's behavior or (07) an uncooperative reaction. If the select pupil leaves the room for any reason, he is coded as (08) a lost pupil. These eight basic types of interaction comprise Level I or the primary level of the general category system for pupil, teacher, and peer behavior. The "0's" before the numbers are necessary for correct printout.

In Level II of the system, five modes of interaction are identified: (1) a combination of verbal and physical, (2) verbal, (3) physical, (4) non-verbal (gestural, vocal, and (5) passive interaction (non-interaction). Notice that these numbers are not preceeded by a "0."

Each of the eight types of interaction in Level I can be further classified into one of the five modes of interaction in Level II. For example, the select pupil can be uncooperative (Level I) with the teacher in a physical mode (Level II)--i.e., is aggressively punching her/him in the stomach (02-3). Likewise, the teacher can be disapproving (Level I) in a verbal mode (Level II)--i.e., says, "Stop that this minute, you little brat!" (05-2). Should the select pupil be aggressively punching a peer in the stomach (02-3), the peer might punch him back (05-3) or yell, "Get offa me, you little creep!" (05-2). In each case there is a number for the type (01-08, Level I) and the mode (1-5) of interaction.

In Level III the focus of the interaction is identified as either on (1) an adult (teacher, aide, principal), (2) a peer, (3) an object, or (4) the select pupil himself/herself. Pupil behavior can thus be classified by three levels: type, mode, and focus of interaction with the environment. For example, if the select pupil is uncooperative in a physical manner with the teacher, it would be coded (02-3-1) or ([uncooperative] - [physical] - [adult]). If the select pupil is cooperative verbally with a peer (e.g., says, "I like your new shoes.") it would be coded (01-2-2) or ([cooperative] - [verbal] - [peer]).

Teacher behavior could also be classified in three levels, but since we are only interested in teacher interactions with the select pupil, we do not need to code Level III because teacher interaction would always occur with the select pupil. Thus, teacher (adult) behavior is identified by two levels. For instance, if the teacher is disapproving in a non-verbal mode, it would be coded (05-4) or ([disapproval] - [non-verbal]).

Peer behavior, like teacher behavior, only concerns us when it is directed towards the select pupil; here again, we do not need to code Level III. If a peer asked the select pupil a question, we would code (06-2) or ([cooperative] - [verbal]). Peer behavior is only coded on two levels because we are only concerned with peer interaction with the target pupil.

The reason we are using numbers to identify categories is that the recording of observations will be done on TOUCH-TONE telephones or DATAMYTES. A TOUCH-TONE telephone is a mechanical device consisting of a button pad with the numbers 1-10, an *(enter) and a #(skip) key. Number-coded observational data is entered on the telephone which sends the codes directly to the computer in the Teacher Education Laboratory (TEL). The data is decoded and the results are printed out in English to use as feedback on pupil social behavior, as well as on adult and peer reactions to that pupil.

A DATAMYTE consists of a buttom pad (like a TOUCH-TONE telephone), an internal timer and a cassette audio tape recorder. Number-coded observational data is entered on the DATAMYTE which is turn records this information on a cassette tape. This tape can later be decoded and summarized by a computer which also prints out the results in English.

The major advantage of this process of collecting information is that after the buttons are pushed and the data is entered, the machines take over. As a result, much time is saved, and human errors of counting and summarizing are reduced.

Read through the following definitions and examples of types and modes of pupil, teacher and peer behavior, please keep their respective number codes in mind.

The major advantage of using a three-level system (type-mode-focus) is that by learning a small number of categories, a fairly large number of two-stage and three-stage combinations can be generated.

SELECT
PUPIL BEHAVIOR

Type of Interaction	Mode of Interaction	Focus of Interaction
Level I	Level II	Level III
01. Cooperative	1. Verbal/Physical	1. Adult
02. Uncooperative	2. Verbal	2. Peer
	3. Physical	3. Object
	4. Non-verbal	4. Self
	5. Passive	

LOST
PUPIL

Identifier
Level I
08. Lost Pupil

TEACHER BEHAVIOR

Type of Interaction	Mode of Interaction
Level I	Level II
03. Approval	1. Verbal/Physical
04. Neutral	2. Verbal
05. Disapproval	3. Physical
	4. Non-verbal
	5. Passive

PEER BEHAVIOR

Type of Interaction	Mode of Interaction
Level I	Level II
06. Cooperative	1. Verbal/Physical
07. Uncooperative	2. Verbal
	3. Physical
	4. Non-verbal
	5. Passive

Cooperative/Neutral Passive = Non-Interaction

Both have to be coded.

Code 0011E to Start Category System

PUPIL BEHAVIOR

(01) Cooperative: The pupil is acting in a manner which is harmonious with his surroundings. That is, his actions are not aggressive, malicious, resistive, abusive, or damaging; nor do his actions cause unwanted (by others) interference with the on-going course of events. The pupil's interaction is coded as cooperative if it is not uncooperative; neutral interactions are coded as cooperative.

(01-1) Cooperative-Verbal/Physical: The pupil is making a coherent, intelligible verbal statement or question and is simultaneously touching, holding, handling, or caressing a part of his body or clothes, a peer, an adult, or an object in a cooperative or neutral manner.

(01-1-1) Cooperative-Verbal/Physical-Adult

--"Thank you!" (while giving a teacher a hug)

--"Here is the book." (while giving teacher a hug)

(01-1-2) Cooperative-Verbal/Physical-Peer

--"Don't you think he's cool?" (while holding hands)

--"I'm not trying as hard as I could." (while playfully arm-wrestling)

(01-1-3) Cooperative-Verbal/Physical-Object

--"Now, it's time for your bath." (undressing doll)

(01-1-4) Cooperative-Verbal/Physical-Self

--"Let's see, this string goes over an' then. . ." (while tying shoes)

--"Hm, I wonder if I should part it on this side or that side?" (while combing hair)

(01-2) Cooperative-Verbal: Pupil is making a coherent, intelligible verbal statement or question which is cooperative or neutral without any physical interaction.

(01-2-1) Cooperative-Verbal-Adult

--"Is this right?"

--"Thank you."

--"Can I be next?"

--Answers question in science lesson.

(01-2-2) Cooperative-Verbal-Peer

--"Let's play a game."

--"Would you like to use my crayon?"

(01-2-3) Cooperative-Verbal-Object

--Talking into tape recorder.

--Singing baby doll to sleep in crib.

(01-2-4) Cooperative-Verbal-Self

--"Hm, I shouldn't have dunnit that way."

--"Maybe I shouldn't have dunnit that way."

(01-3) Cooperative-Physical: Pupil is touching, holding, handling, or caressing a part of his body or clothes, a peer, an adult, or an object in a cooperative or neutral manner without verbalization (i.e., does not hurt, injure, or damage someone or something).

(01-3-1) Cooperative-Physical-Adult

--hugs, pats, caresses.

--touches.

--sits on lap.

--holds hands or arm.

(01-3-2) Cooperative-Physical-Peer

--hugs, pats, caresses.

--holds hands or arm.

--playfully wrestles.

--tickles (no malicious intent).

--combs hair.

(01-3-3) Cooperative-Physical-Object

--actively plays with, handles and/or manipulates a doll, toy, typewriter, blocks, etc.

--climbs on jungle gym.

--colors with crayons.

--writes.

--saws, drills wood.

(01-3-4) Cooperative-Physical-Self

--ties shoe.

--plays with ring on finger.

--combs hair.

--plays with belt.

--runs, walks.

(01-4) Cooperative-Non-verbal: Pupil cooperatively communicates non-verbally with peer or adult through gestures, facial expressions, certain postures, or through vocalizations which are not grammatical thoughts; or pupil is non-verbally self-involved.

(01-4-1) Cooperative-Non-verbal-Adult

--signals by raising/waving hand or arm.

--says, "Hey!"

--whistles to get attention.

--smiles only.

--laughs with teacher.

--raps to get attention.

(01-4-2) Cooperative-Non-verbal-Peer

--signals by waving arm.

--whistles to get attention.

--snaps fingers to get attention.

--smiles only.

--"Shhh."

--laughs with peer.

(01-4-4) Cooperative-Non-verbal-Self

--hums (to self).

--laughs to self.

--makes facial expressions in mirror.

(01-5) Cooperative-Passive: Pupil is not overtly interacting with the environment, rather he is passively receptive to peer, adult, or object, or totally indifferent to surroundings.

(01-5-1) Cooperative-Passive-Adult

--watches demonstration of science experiment by teacher.

--listens to explanation by aide.

(01-5-2) Cooperative-Passive-Object

--reads a book.

--watches TV, films.

--listens to record, tape.

(01-5-4) Cooperative-Passive-Self**

--sleeping.

--staring at wall.

**--any pupil behavior not otherwise clearly classifiable should be coded in this category (01-5-4)

(02) Uncooperative: The pupil is acting in a manner which is not harmonious with himself or his surroundings. That is, his actions are aggressive, malicious, resistive, abusive, or damaging; or his actions cause unwarranted (by others) interference with the on-going course of events.

(02-1) Uncooperative-Verbal/Physical: Pupil is making a coherent, intelligible verbal statement or question which is uncooperative (aggressive, malicious, resistive, abusive) and is simultaneously touching, holding, handling, pushing a part of his body or clothes, a peer, an adult, or an object in an uncooperative manner (i.e., hurts, injures, damages someone or something).

(02-1-1) Uncooperative-Verbal/Physical-Adult

--"No, I won't do it!" (while struggling to get away from teacher's grasp).

--"You're a @#$%¢!" (kicking teacher in the shins).

(02-1-2) Uncooperative-Verbal/Physical-Peer

--"Hey, you dumb smartass!" (while pinching peer).

--"I'm gonna beat you till you can't walk!" (while hitting peer in the face).

(02-1-3) Uncooperative-Verbal/Physical-Object

--"Goddamn compass!" (while hurling compass at window).

--"This is the worst piece of crap I've ever seen!" (while kicking the toy across the room).

(02-1-4) Uncooperative-Verbal/Physical-Self

--"I can't do anything right!" (while pounding self on knee with fist).

--"I must be the stupidest person in the world!" (while banging head against wall).

(02-2) Uncooperative-Verbal: Pupil is making a coherent, intelligible verbal statement or question which is uncooperative (aggressive, malicious, resistive, abusive).

(02-2-1) Uncooperative-Verbal-Adult

--"No, I won't do it!!"

--"You're a @#$%!"

(02-2-2) Uncooperative-Verbal-Peer

--"Hey, you jerk!"

--"If you ever do that again, I'll getcha. . .!!"

(02-2-3) Uncooperative-Verbal-Object

--"@#$%!! no good wrench!"

(02-2-4) Uncooperative-Verbal-Self

--"I hate myself!"

--"I just don't do anything right!"

(02-3) Uncooperative-Physical: Pupil is touching, holding, handling, pushing a part of his body or clothes, a peer, an adult, or an object in an uncooperative manner (i.e., hurts, injures, damages someone or something).

(02-3-1) Uncooperative-Physical-Adult

--resists, struggles forcefully.

--hits, hurts.

--bites.

--pushes maliciously.

--jabs, pinches.

(02-3-2) Uncooperative-Physical-Peer

--fights maliciously.

--hits, hurts.

--bites.

--pushes, jabs, pinches.

--pulls hair.

(02-3-3) Uncooperative-Physical-Object

--breaks.

--damages (defaces property).

--disfigures, ruins,

--kicks,

--throws something that should not be thrown,

(02-3-4) Uncooperative-Physical-Self

--tears clothes (intentionally).

--bangs head on wall,

--bites, jabs, hurts self,

(02-4) Uncooperative-Non-verbal: Pupil communicates with peer or adult in a non-verbal uncooperative (aggressive, resistive) manner through gestures, facial expressions, certain postures, or through vocalizations which are not grammatical thoughts; or pupil is non-verbally self-involved in an uncooperative manner.

(02-4-1) Uncooperative-Non-verbal-Adult

--frowns, glares.

--vocalizes hostility (e.g., "Yuk!").

--laughs at menacingly.

--gesturally threatens by cocking arm,

(02-4-2) Uncooperative-Non-verbal-Peer

--sticks out tongue maliciously.

--laughs at peer mistake in haughty manner,

--frowns, glares,

--gesturally threatens by cocking arm,

--teases ("Nya, nya, nya-nya, nya.").

(02-4-4) Uncooperative-Non-verbal-Self

--cries, whines, moans.

--makes gestures which show dissatisfaction or disgust with self (e.g., throws hands up into air and goes "Aaagh!").

TEACHER BEHAVIOR
(with Select Pupil only)

(03) Approval: Teacher overtly accepts or supports the select pupil's behavior directly in such a way that the pupil knows which behavior is being approved.

(03-1) Approval-Verbal/Physical

--praises with arm around pupil.

--"Hey, that was really good!" (while patting on pupil's head).

(03-2) Approval-Verbal

--praises, encourages.

--"Yes!"

--"You did that well!"

--"I'm glad you controlled yourself."

(03-3) Approval-Physical

--hugs, pats, touches.

--holds hands, arms.

--holds on lap, fondles.

(03-4) Approval-Non-verbal

--smiles, laughs with pupil.

--nods affirmatively.

--gestures, vocalizes affirmatively.

--"Mmmm!"

--"Ahhh!"

--"Wow!"

(03-5) Approval-Passive

--attends (listens) to pupil talking.

--intently watches pupil do drawing.

(04) Neutral: Teacher is explicitly interacting with the select pupil without expressing overt approval or disapproval of that pupil's behavior.

(04-1) Neutral-Verbal/Physical

--holds arm while showing how to draw a capital "B" saying "First you make a straight up-and-down line. . ."

--"You make a loop with one string . . ." while trying pupil's shoe for him.

(04-2) Neutral-Verbal

--lectures, demonstrates (to select pupil only).

--gives directions, structures.

--gives cues.

--reads a story.

--"Johnny, please push in your chair."

(04-3) Neutral-Physical

--contact during games, sports.

--guides pupil's hand in drawing, writing.

--helps child put on boots, shoes, clothing.

(04-4) Neutral-Non-verbal

--signals for pupil to move closer.

--"Psst." (to get pupil to watch teacher instead of book).

(04-5) Neutral-Passive: Teacher is not directly interacting with the select pupil (although she/he may be interacting with a group of which the pupil is a member).

--works at desk.

--works with or talks to other pupils.

--out of area.

(05) Disapproval: Teacher overtly does not accept or support the pupil's behavior in such a way that the pupil knows which behavior is not being accepted or supported.

(05-1) Disapproval-Verbal/Physical

--criticizes child while spanking him.

--"Stop that!" (while grabbing pupil's arm).

--"Now, you apologize for hitting him IMMEDIATELY!" (while holding firmly by back of neck).

(05-2) Disapproval-Verbal

--criticizes, blames.

--threatens, warns.

--demeans,

--commands, demands.

--"Stop that!"

--"If you do that again . . . (something bad will happen) . ."

(05-3) Disapproval-Physical

--hits, slaps (to punish).

--holds, grabs (to contain).

--pinches.

--pushes, shoves.

(05-4) Disapproval-Non-verbal

--shakes head negatively, snaps fingers, clears throat.

--frowns, glares, scowls,

--gestures negatively.

--stands with hands on hips.

--vocalizes negatively.

(05-5) Disapproval-Passive

--intentional ignoring when pupil is obviously trying to get adult attention.

PEER BEHAVIOR
(with Select Pupil only)

(06) Cooperative: Peer behaves toward select pupil in any overtly friendly or non-threatening manner. Peer and select pupil can be working together, standing in line together or interacting across the room; as long as the peer remains friendly and/or non-threatening the interaction will be coded as cooperative/neutral.

(06-1) Cooperative-Verbal/Physical

--"I wanna sit with you!" (with arm around select pupil).

--Pupil suggests game. Peer puts hand on shoulder and says "Yeah, let's go!"

(06-2) Cooperative-Verbal

--Pupil asks peer a question and he answers it.

--"Hey, I know how to do that problem. I'll help you."

(06-3) Cooperative-Physical

--Pats, hugs, touches in friendly way.

--Holds hands, arms,

(06-4) Cooperative-Non-verbal

--Smiles at, laughs with pupil.

--Nods affirmatively.

--Claps hands when pupil expresses opinion.

(06-5) Cooperative-Passive

--Listens to select pupil talk but does not participate, does not interact,

--Watches pupil working at his desk.

(07) Uncooperative: Peer refuses positive interaction with pupil or behaves in a malicious, threatening manner.

(07-1) Uncooperative-Verbal/Physical

--When asked for help peer pushes student away, saying, "No, I'm not gonna do it!"

--Pupil bumps into peer accidentally. Peer grabs him, yelling, "Why don't you watch where you're going?"

(07-2) Uncooperative-Verbal

--teases student in a malicious way.

--tattles on student.

--threatens student.

(07-3) Uncooperative-Physical

--snatches pencil, book, etc. from pupil.

--hits, hurts student.

--pushes, shoves student.

(07-4) Uncooperative-Non-verbal

--glares, makes faces at student.

--pouts, withdraws from student.

(07-5) Uncooperative-Passive

This is not coded. Passive behavior is basically neutral rather than uncooperative; therefore it is coded as cooperative.

Two Situational Categories

In addition to coding types of pupil, teacher and peer actions, we are interested in the circumstances under which they occur. Specifically, activity and pupil movement will be coded. The procedure for coding each of these categories is similar to that for pupil, teacher and peer categories.

In Level I the situational factors are identified as (09) activity and (10) movement. These number codes are necessary to distinguish these categories from pupil, teacher and peer categories in Level I ([01 and 02], [03, 04, 05], [06, 07], and [08]).

The name of the activity or movement is identified in Level II. These names and their number codes are listed on the following pages. For example, if the pupil walks to the desk to hand in a spelling paper, it would be coded (10-2): ([movement] - [walking]) and (09-4-2): ([activity] - [spelling] - [pupil]).

The third part of the above coding is the initiator of the activity; for activity only the initiator is identified in Level III as (1) an adult, (2) a peer, or (4) the select pupil herself or himself. If the activity above were initiated by a peer, it would be coded (09-4-2): ([activity] - [spelling] - [peer]). It should be noted that most academic activities are initiated by the teacher, with the exception of whatever activity the pupil may choose during free time periods. There are no Level III codes for movement categories.

(09) Activity

(09-1) Activity-Reading: These activities include the subject matter of reading.

(09-1-1) Activity-Reading-Adult Initiated

--The teacher tells the student to read out loud from his reader.

(09-1-2) Activity-Reading-Peer Initiated

--A friend of the select pupil suggests that they read in free time.

(09-1-4) Activity-Reading-Self-Initiated

--The select pupil chooses to read a book during some free time.

(09-2) Activity-Math: These involve subject matter connected with math.

(09-2-1) Activity-Math-Adult-Initiated

--The teacher puts a group of math problems on the chalkboard for the student to work.

(09-2-2) Activity-Math-Peer-Initiated

--A friend of the select pupil suggests that they work problems in free time.

(09-2-4) Activity-Math-Self-Initiated

--The select pupil works in his math workbook during some free time.

(09-3-X)Activity-Language Arts-X: Students are participating in activities which include a language program, creative writing, penmanship, etc.*

(09-4-X)Activity-Spelling-X: These activities include copying spelling words from the chalkboard, practicing the writing of those words on paper and spelling the words out loud.*

(09-5-X)Activity-Special Subjects-X: Art, biology, and science are all examples of special subjects.*

(09-6-X)Activity-Physical-X: Any organized activity in the classrooms that involves physical skill: for example, bean bag toss or calisthenics.*

---

*(09-2-X) means that (09-2-1), (09-2-2) and (09-2-4) are possible codes but they will not be listed to save space. You should understand that each activity is either adult-, peer-, or self-initiated.

(10-7-X) Activity-Special Event-X: These are organized group activities which are not part of the regular daily routine (e.g., birthday parties, movies, Halloween and Christmas parties, special games).*

(09-8-X) Activity-Other (social)-X: These involve non-curriculum activities, such as free time or socializing with peers, which cannot be classified into one of the above categories.*

(09-9-X) Activity-Transitional-X: These activities include preparation for or termination of other activities, like clean-up, moving between areas, going to lunch, recess, etc.*

(11) Movement

(10-1) Movement-In Seat: The pupil is sitting in his assigned seat, whether at his desk, at a table with the aide, or at an activity table.

(10-2) Movement-Stationary: The pupil is basically standing, lying or or kneeling, also she/he need not be still or motionless. As long as the pupil does not take more than three consecutive steps in the same general direction, she/he is considered stationary.

(10-3) Movement-Walking: The pupil takes more than three steps in the same general direction, moving in a heel-to-toe fashion with one foot touching the floor at all times.

(10-4) Movement-Running: The pupil takes more than three steps in the same general direction, moving relatively quickly on the balls of his feet. Part of the time neither foot is touching the floor.

---

*(09-2-X) means that (09-2-1), (09-2-2) and (09-2-4) are possible codes but they will not be listed to save space. You should understand that each activity is either adult-, peer-, or self-initiated.

ACTIVITY TIME LINE

Identifier	Name of Activity	Initiator of Activity
Level I	Level II	Level III
	1. Reading	1. Adult
09. Activity	2. Math	2. Peer
	3. Language Arts	4. Select Pupil
	4. Spelling	
	5. Special Subjects	
	6. Physical	
	7. Special Event	
	8. Other (Social)	
	9. Transitional	

MOVEMENT TIME LINE

Identifier	Name of Movement
Level I	Level II
10. Movement	1. In seat (body is firmly in the chair)
	2. Stationary (standing by seat or table for special activity, etc.)
	3. Walking
	4. Running

Coding Procedure for Category System

The basic procedure for coding on the category system is very simple. Once you have coded a given behavior, you do not need to code it again until the behavior changes. For example, suppose the select pupil is cooperative/ in a passive mode with the teacher (01-5-1)--i.e., he/she is sitting there watching the teacher do a scientific experiment. After you have coded 01-5-1-E or * you do not code the pupil's behavior again until it changes from a 01-5-1 to something else. It's that simple; the telephone or DATAMYTE automatically keeps track of the amount of time for each code.

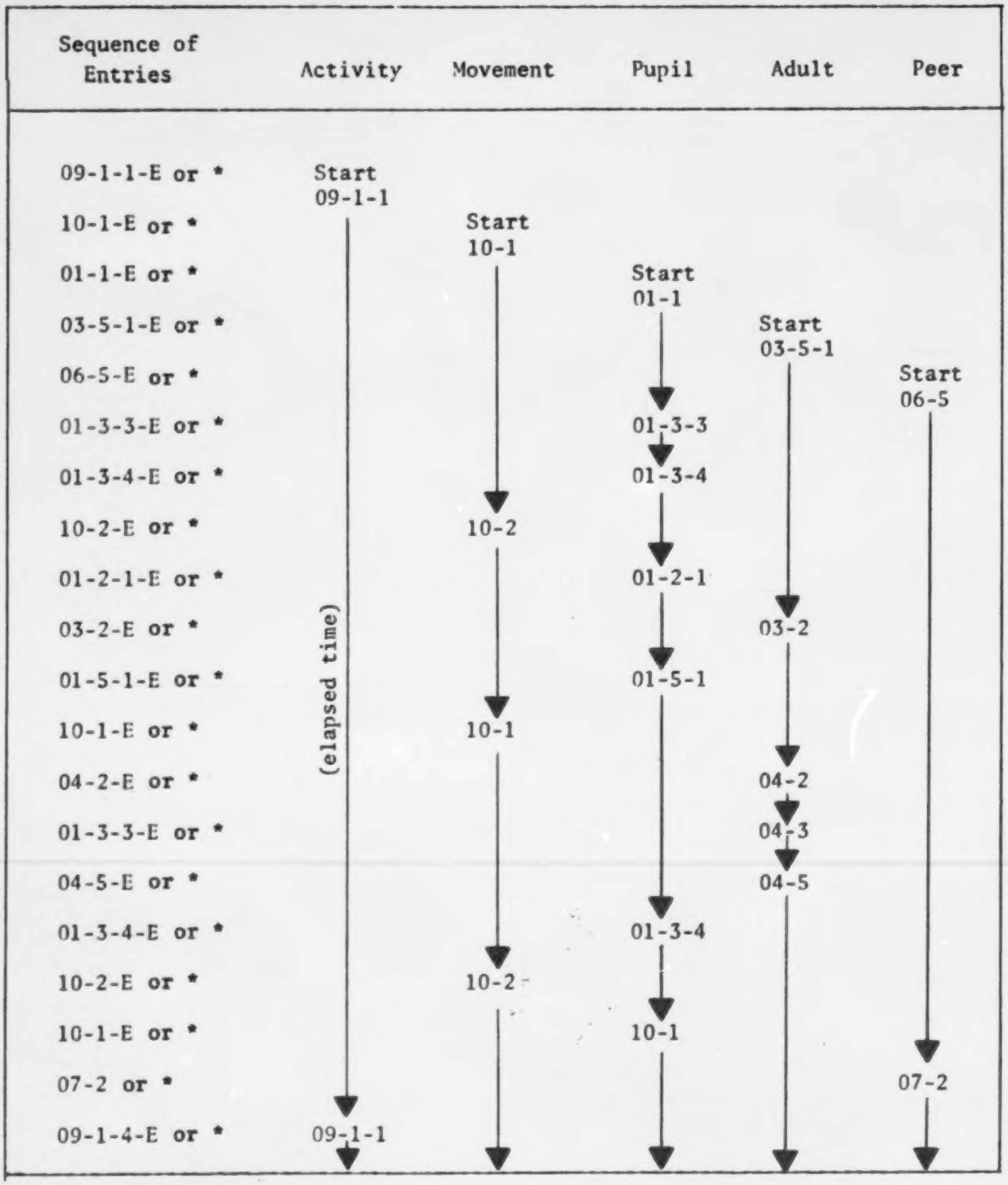
Teachers, pupils and peers do not act independently; rather they interact. They also act concurrently within a context (activity, movement). Thus, you need to keep track of five simultaneous timelines: select pupil behavior, adult behavior with select pupil, peer behavior with select pupil, activity and pupil movement.

This is not as hard as it sounds. Activity does not change as frequently as pupil, teacher and peer behavior. Once you have entered an activity code, you need not concern yourself with it until it changes.

Essentially, you focus on the select pupil's actions (01 or 02-XX) and movement patterns (10-X), coding changes in either or both whenever they occur. If an adult or peer is not directly interacting with a pupil you code a (04-5) or (06-5). Only when an adult or peer directly interacts with the select pupil will you need to code adult behavior (03, 04, or 05-X), or (06, or 07-X). When the interaction ceases you then put the adult behavior back on (04-5) and the peer behavior on (06-5).

Example 1: The activity is spelling, which was initiated by the teacher 10-4-1. The select pupil, Sammy, is sitting 10-1 at a table listening to the teacher 01-5-1 giving directions to the whole group 04-5. (You have now established all five timelines. You only need to code when there is a change in any one.) Sammy begins to write in his spelling workbook 01-3-3. The teacher, when finished with the directions, goes to her desk and starts preparing other worksheets (no code because it's still a 04-5). Sammy gets up and walks 10-3 to the teacher's desk and says, "Will you help me with these words?" 01-2-1. The teacher says, "Sure, I'm glad you've asked me for help when you're having difficulty," 03-2. (Meanwhile, Sammy is standing there listening 01-5-1, 10-2.) The teacher then tells him how to spell the words 04-2. Sammy is listening and writing them out as she gives them to him 01-3-3. Then he leaves the teacher 04-5, walks across the area 10-3, sits down at the talbe 10-1, and starts reading 01-3-3 a story. Sammy finishes the story and puts the book away (no change in code). He begins talking to his friend Greg 01-2-2 who sits next to him. Greg smiles and nods 06-4 as Sammy talks. Then Greg begins to talk animatedly while holding Sammy's arm 06-1. Sammy jerks his arm away 02-3-2 and jumps out of his seat 10-2. The teacher looks up from her work and watches both boys 04-5, but Greg apologizes to Sammy for grabbing his arm 06-2, Sammy sits down 10-1, and the boys continue to talk quietly 01-2-2, 06-2.

Five Timelines



Sequence of Entries	Activity	Movement	Pupil	Adult	Peer
09-1-1-E or *	Start 09-1-1				
10-1-E or *		Start 10-1			
01-1-E or *			Start 01-1		
03-5-1-E or *				Start 03-5-1	
06-5-E or *					Start 06-5
01-3-3-E or *			01-3-3		
01-3-4-E or *			01-3-4		
10-2-E or *		10-2			
01-2-1-E or *			01-2-1		
03-2-E or *				03-2	
01-5-1-E or *			01-5-1		
10-1-E or *		10-1			
04-2-E or *				04-2	
01-3-3-E or *				04-3	
04-5-E or *				04-5	
01-3-4-E or *			01-3-4		
10-2-E or *		10-2			
10-1-E or *			10-1		
07-2 or *					07-2
09-1-4-E or *	09-1-1				

Figure 6. Representation of example as perceived by the computer.

Coding Ground Rules

1. Order Rule: For pupil, adult, and peer behavior only, it is important to enter codes in the same sequence in which they occurred. For example, if the pupil asks the teacher a question and then the teacher answers; code pupil first, then teacher (i.e., 01-2-1, 04-2, 01-5-1).

2. Precedence Rule: It is obvious that the pupil (or adult) can behave simultaneously in more than one category. For example, the pupil can be tying his shoe, 01-3-4, and listening to the teacher 01-5-1 at the same time. Since we cannot enter two different codes for this one action, the following rule applies:

   > The Precedence Rule is that the lower level takes first precedence and the lower number within a level takes second precedence in deciding on a code when more than one code is possible for a given action.

   Examples:

   a. A pupil is cooperative-verbal-peer, 01-2-2, and simultaneously cooperative-passive-teacher, 01-5-1. There is no problem with Level I--both codes are cooperative 01. In Level II, there is a conflict, but since verbal 02 is a lower number than passive 05 within Level II, verbal 02 takes precedence. Since he was only verbal with a peer, this is coded as 01-2-2.

   b. The pupil is talking to both the teacher and a peer. The choice is between 01-2-1 and 01-2-2. In Level III, adult 1 takes precedence over peer 2, so the code is 1-2-1.

   c. The pupil is playing with his shirttail and talking to the teacher, 01-3-4 vs. 01-2-1. In Level II verbal 2 takes precedence over physical 3, so the code is 01-2-1.

   d. The teacher is talking to the select pupil and using gestures 04-2 vs. 04-4. In Level II, verbal 2 takes precedence over non-verbal 4, so the code is 04-2.

3. If-in-doubt Rules: In order to assure uniformity in coding among observers, the following guidelines are provided to resolve ambiguities:
   a. If a pupil is both cooperative and uncooperative, code him as uncooperative.
   b. If a teacher is both neutral and approving, code approving.
   c. If a teacher is both neutral and disapproving, code disapproving.
   d. If a teacher is both approving and disapproving, code disapproving.
   e. If a pupil is passive and you are not sure what the focus is, code 01-5-4.
   f. If it is unclear whether or not the teacher is directly interacting with the select pupil, code 04-5.
   g. If in doubt about who initiated the current pupil activity, assume it was adult-initiated (unless you have evidence to suspect otherwise).
   h. If in doubt about the ground rules, use your best judgment.
4. Lost Pupil Rule: Whenever you lose track of the pupil, or you have to stop momentarily (e.g., to blow your nose; to stop a fight) you should code 08. When you resume coding, code the pupil behavior first. If none of the other timelines has changed, then you do not need to re-enter their codes.
5. Entry Rule: When coding on DATAMYTES, the normal process for entering each complete code is to push the appropriate number buttons (e.g., 01-2-2 and then push the "Enter" button (lower left hand corner of button array). When you push the "Enter" button this records this number code on the cassette tape and starts the internal clock that keeps track of the behavior's duration. Once a complete code has been

followed by an "Enter," it is permanently recorded. This is also true for the * on the TOUCH-TONE telephone.

6. Skip Rule: If you push a wrong number button by accident BEFORE you have pushed the "Enter" or * button, then you can "erase" your mistake by hitting the "skip" or # button once (lower right hand corner of the button array). Then you must re-enter the complete number code (and push "Enter" or *) when correcting your mistake.

7. I-Forgot Rule: Whenever you forget what the code is in one or more of the timelines, it does not hurt to re-enter the code. (E.g., if you forgot that you coded a 04-5, and the teacher is now 04-5, you should code another 04-5.)

Observer Sequence for TOUCH-TONE Telephone

Before 1: Get schedule and know where you are supposed to be and at what time. Get schedules for classroom activities from the teachers.

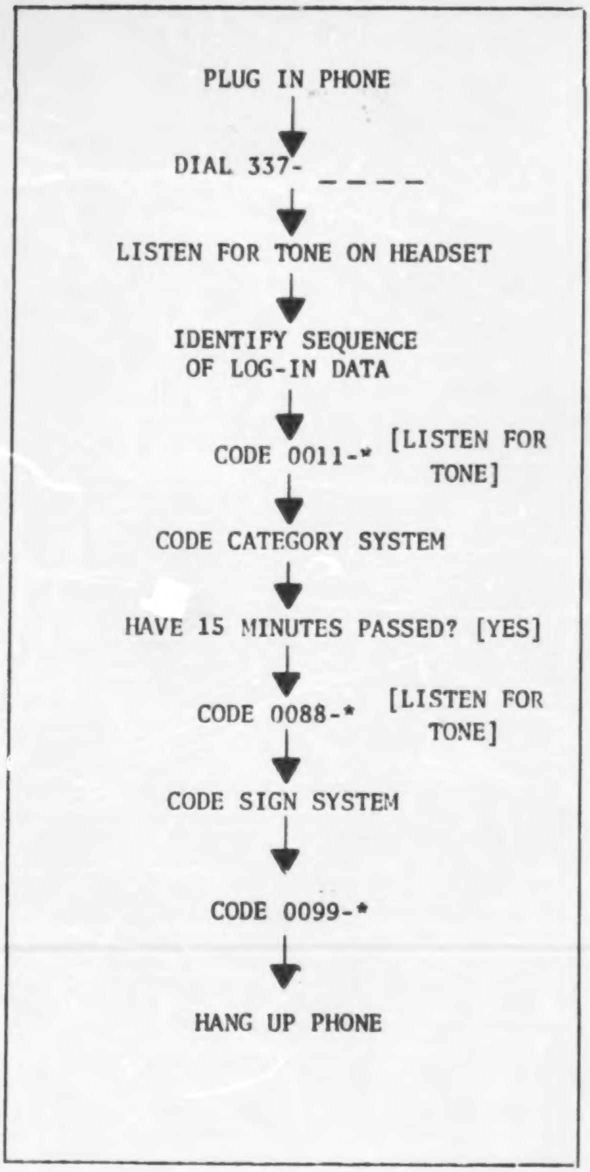
1. Find classroom
2. Plug in phone.
3. Dial telephone. You will dial a 337-_ _ _ _ number which will be given to you.
4. Listen for tone on headset to confirm the connection. If no tone is heard, hang up and dial again.
5. Identify sequence
    a. Project: either 1-*, 2-*, or 3-*. It is important that this be correct; otherwise data will be improperly organized. Notice that the numbers are single, without the 0.
    b. Teacher number: (2 digits) - *
    c. Student number: (2 digits) - *
    d. School number: (2 digits) - *
    e. Coder number: (2 digits) - *
    f. Date: Month, day, year. For example, February 8, 1976 would be coded as 02876*
    g. Feedback number: either 1-*, 2-* or 3-*. 1 is reliability data, 2 is baseline data, and 3 is observation period data. This number is also not preceded by a 0.
    h. Time started: (4 digit) - *. 1 o'clock would be coded 0100, 12 o'clock would be 1200 etc.

If a mistake is made after hitting the *, you must code the one set of numbers again. If a mistake is made before hitting the *, press # and code numbers again.

6. To start data collection, enter: 0011-*. Listen for tone and if tone is not heard, enter 0011-* again until tone is heard. Collect data for 10 minutes.
7. Code sign system data: Enter 0088-* until tone is heard. Sign system numbers must be two digit, so numbers 1 through 9 are coded 01, 02, 03...09.
8. Log out with 0099-* and hang up the phone. You must log out completely and begin again, even if the next observation period follows immediately.

REMEMBER: The * is the Enter Key and the # is the Skip Key. A mistake made before hitting the * (Enter Key) can be corrected by hitting the # (Skip Key). For a mistake made after pressing the * key, check your procedures.

TELEPHONE CODING MECHANICS FLOWCHART


PLUG IN PHONE
DIAL 337- ____
LISTEN FOR TONE ON HEADSET
IDENTIFY SEQUENCE OF LOG-IN DATA
CODE 0011-* [LISTEN FOR TONE]
CODE CATEGORY SYSTEM
HAVE 15 MINUTES PASSED? [YES]
CODE 0088-* [LISTEN FOR TONE]
CODE SIGN SYSTEM
CODE 0099-*
HANG UP PHONE

Coding Procedures for DATAMYTES

1. To start a session, when you have located the select pupil, turn the DATAMYTE power on (be sure the red light shines steadily), and enter 5 (five) skips.

KEY: E = Enter
S = Skip

2. Rules for button pushes:
   a. IMPORTANT NOTE: You must hesitate 1/2 second after the ENTER key is pushed before pushing any other keys. This key requires more time than the others because a four-digit "clock reading" is stored whenever the ENTER key is struck.
   b. Push the ENTER button after each completed code.
   c. Push the SKIP button to clear erroneous codes.
   d. Buttons should be firmly depressed. Do not peck at the buttons.
   e. Use one finger only.
   f. Never press a new button until the preceding one is released. (This won't be a problem if you remember to use only one finger.)

3. Code Log-In Data: The first data recorded during each session are biographical in nature; they should match the data which are written on the cassette:
   a. Project: either 1-E, 2-E or 3-E. It is important that this be correct; otherwise data will be improperly analyzed. Notice that the numbers are single, without the 0.
   b. Teacher number: (2 digits) - E
   c. Student number: (2 digits) - E
   d. School number: (2 digits) - E
   e. Coder number: (2 digits) - E

f. Date: month, day, year. September 2, 1976 would be coded 09276-E.

g. Feedback number: either 1-E, 2-E, or 3-E. 1 is reliability data, 2 is baseline data and 3 is observation period data. This number is not preceeded by a 0.

h. Time started: (4 digit) - E. 1 o'clock would be coded 0100, 11 o'clock would be 1100.

If a mistake is made after hitting the E, you must re-enter last line. If before the E, hit S and code number again.

4. Code 0011-E Twice: This code signals the computer that all of the log-in data has been entered and a new data record is about to begin.

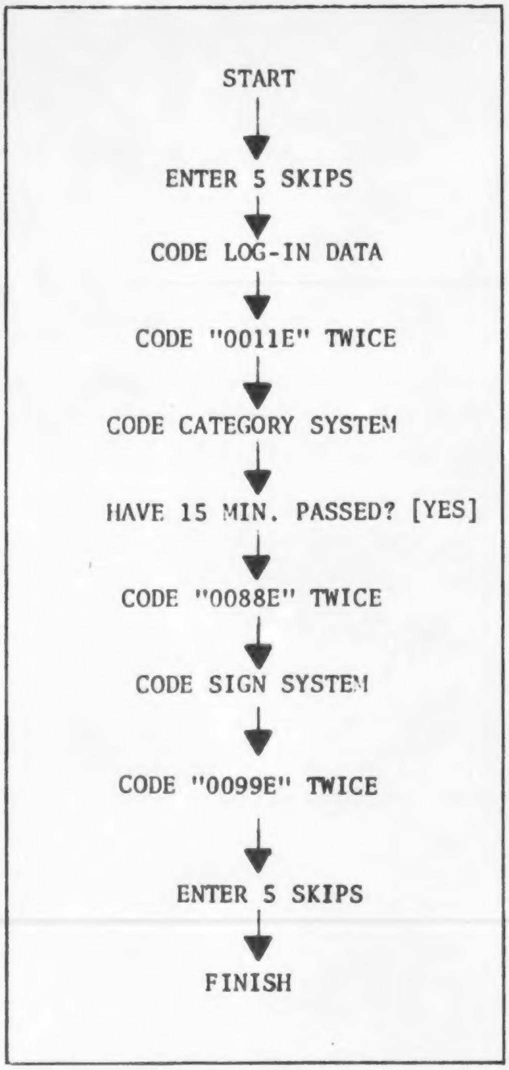
5. Code Category Data: After the Code 0011-E has been entered, the observer should begin observing and coding the category system. Begin with the situational data and then pupil/teacher/peer categories. Code for 10 minutes.

6. After 10 minutes of category coding, it is time to code sign system data. Enter 0088-E twice (this signals the computer that the sign data is coming. Then enter the sign system. Remember, each item is coded only once, no matter how often it occurred.

7. The observation period has expired. Code 0099-E twice. This signals the computer that the observation period is over.

8. Enter five skips.

CODING MECHANICS FLOWCHART


START
ENTER 5 SKIPS
CODE LOG-IN DATA
CODE "0011E" TWICE
CODE CATEGORY SYSTEM
HAVE 15 MIN. PASSED? [YES]
CODE "0088E" TWICE
CODE SIGN SYSTEM
CODE "0099E" TWICE
ENTER 5 SKIPS
FINISH

Practice Coding Script
for General Category System
30 Minutes

Teacher: Ms. Smith

Aide: Ms. Brown

Select Pupil: Bob

Peers: David, Carole, Jim, Wes, Stanley, Joyce, Pat, and Julie

10:10 a.m.

When you find Bob he is sitting ____ at his desk in the classroom working on ______ a math worksheet ______. The teacher is at a table working with a small group on another exercise ____. The aide is playing a card game with Carole _______.

Stanley goes "Psst" trying to get Bob's attention ____. Bob looks up and smiles ______ but goes back to his worksheet ______.

10:15 a.m.

Bob gets up, goes across the room, and takes his paper to the aide to to be checked ____, ______.

Bob: "Ms. Brown, will you check my paper?" ______, ____.

Ms. Brown: "Just as soon as I finish this game with Carole." ____.

Bob: (Moves two steps to the next table where David is reading ____.

He puts his arm around David): "Whatcha doin'?" ______.

David: "Readin'." ____

Bob: "Whatcha readin'?" ______

David: "Book." ____

10:18 a.m.

Ms. Brown: "Bob, I'm ready now." ____

Bob: (Moves back to Ms. Brown ___ leans against her shoulder ______, and sticks his tongue out at Carole ______ who makes a face at him): "See you later, David." ______.

10:19 a.m.

Bob moves to an adjacent chair ____. Ms. Brown and Bob talk about his math worksheet ____, _____.

10:22 a.m.

Ms. Brown (touches Bob's arm): "Good job, Bob." ____. (Bob is listening ______.)

Ms. Smith: "It's time for art, now ______. Everyone go back to your desk and get ready ____."

Bob goes back to his desk ____. On the way he manages to kick Wes' foot Wes grabs at him saying, "You "punk" __________, but misses and Bob sits down ____.

10:25 a.m.

Ms. Smith: "Today I thought you might like to continue making the paper mache dragon." (Bob is staring out of the window ______.) "We formed the chicken wire yesterday, and we'll cover it today. When it's covered, we'll paint it. Bob, will you get some newspapers from the cabinet?" ____.

Bob (startled): "What?" ______.

Ms. Smith: "Where were you, Bob?" ____.

Bob: "I was thinkin' about that creep, Wes. I'm gonna beat the shit outa him." ______.

Wes: "You and who else?" ____.

Bob: "Just me." ______.

Ms. Smith: (raising her voice) "Cut that out!" ____. Bob gives Wes the finger ______ which is returned ____. They quiet down ______.

Ms. Smith: "Joyce, maybe you'd better get the paper." ____ (Joyce brings the paper) "Thanks." (Ms. Smith explains how to make paper mache. Bob is paying attention ______.)

10:30 a.m.

Students all begin to work on paper mache ______.

Bob: (to David)"This stuff is gooey." ______.

David: "Let's smear it on Wes." (They begin to put the paste on Wes ______).

Wes: "Teacher!"

Ms. Smith: (grabbing **Bob** and David): "If you can't behave you'll go out." ____.

Bob: (punching Ms. Smith): "Get you're hands offa me!" ______.

Ms. Smith: (letting go of David): "Not until you calm down." _______. (Moving Bob, who is struggling to a chair ______). "Sit here until you're under control." (Lets go of Bob.)

Bob: "You stink!" ______.

Ms. Smith: "When you can work cooperatively you may go back to the dragon." ____.(Ms. Smith returns to the other students.)

10:37 a.m.

Bob sits and watches Ms. Smith and the others working on the dragon and fiddles with his shirt buttons. ______.

10:40 a.m.

Bob gets up and wanders ____ around the room looking at nothing in particular ______. Ms. Smith catches his eye and smiles ____, ____.

Bob ignores her _____,_____. He finds some modeling clay and begins modeling with it ______.

Sign System

The following sign system has been developed to complement the information gained from the category system. For purposes of teacher feedback, more specific descriptions of what occurred can be useful in interpreting the general category system. For example, suppose that the select pupil was uncooperative with his peers for 60% of the time he was observed. The sign system would indicate the specific ways in which she/he was uncooperative--i.e., she/he warns and threatens, teases with malice, and interrupts persistently.

The way in which the sign system is used is as follows: Observe the select pupil for 10 minutes coding on the general category system. At the end of this time, stop coding on the category system. Then, read through a written list of specific behaviors and ask yourself whether or not each occurred at least once during that 15-minute interval. If a particular behavior did occur, enter its number code into the telephone or DATAMYTE. If it did not, enter nothing.

While the sign system entails a large number of specific descriptions of pupil, teacher and peer behavior, it can tell neither the frequency, duration, nor the order in which they occurred. The category system does, however, include the latter information. In this way, the two systems complement each other, as well as provide a little variety in the coding process.

Following are the sign system descriptors and their respective number codes. Comment will be made only if a descriptor is not self-explanatory.

Sign System

A. Target Pupil Behavior

Cooperative Behavior

01 Offers to share/shares (adults or peers)
02 Helps others
03 Pats, hugs, touches (either adults or peers)
04 Smiles, laughs
05 Praises others
06 Listens attentively (for one or more minutes)
07 Asks permission
08 Follows teacher's group directions
09 Follows teacher's individual directions
10 Responds cooperatively to feedback from others
11 Works on assigned task

Communicative Behavior

12 Asks teacher questions
13 Justifies own actions/feelings (gives reasons for behavior/feelings/attitude)
14 Positively express feelings (e.g., "I like you.")
15 Negatively expresses feelings (e.g., "I hate you!")
16 Participates in teacher-initiated discussion
17 Talks cooperatively with peers
18 Talks uncooperatively with peers

Uncooperative Behavior

19 Bolts from classroom
20 Interrupts activity of others
21 Makes noises intentionally
22 Yells, screams
23 Resists teacher's group directions or control efforts
24 Resists teacher's individual directions or control efforts
25 Threatens teacher or peer
26 Criticizes others
27 Blames others
28 Teases others with malice
29 Negatively demands (e.g., "Go away!'; 'Give it back!")
30 Glares, makes faces, frowns, makes negative gestures
31 Damages property (or tries to)
32 Hits, physically abuses others
33 Ignores teacher's group directions or control efforts
34 Ignores teacher's individual directions or control efforts
35 Daydreams, fidgets, wastes time (off-task, in-seat)
36 Wanders around the classroom (off-task, out-of-seat)
37 Takes others possessions
38 Interrupts others' conversation
39 Interrupts work of others

Dependent/Immature Behavior

40 Request help
41 Avoids eye contact with others
42 Hangs head down, looks away
43 Pouts
44 Whines
45 Makes unreasonable demands on teacher's attention (requests instructions repeatedly, etc.)
46 Cries
47 Seeks reassurance/support (peers or adult)
48 Excluded by teacher

B. Teacher Behavior Toward Select Pupil

49. Hugs, pats, touches
50. Smiles, laughs
51. Praises, encourages
52. Attends individually (one of more minutes with select pupil)
53. Redirects, gives corrective feedback
54. Requests help/cooperation (asks student to do something)
55. Promises/contracts (e.g., "If you finish your work, you can have some free time.")
56. Uses humor
57. Ignores the student
58. Asks reasons for actions (asks pupil why he has acted in a certain way)
59. Positively responds to pupil's ideas, feelings
60. Gives tangible reward
61. Justifies own actions (e.g., "I yelled at you because you were making too much noise.")
62. Yells, screams
63. Warns, threatens ("If you do that one more time. . .")
64. Criticizes, blames
65. Teases (malicious)
66. Negatively commands (e.g., "Stop that!"; "Don't throw that book!")
67. Frowns, shakes head
68. Hits, hurts, punishes
69. Physically restrains
70. Removes privileges
71. Reminds of rules, norms
72. Rejects ideas, feeling
73. Signals for the student to do something
74. Excludes from activity
75. Does not attend to student

C. Peer Behavior Toward Select Pupil

76. Offers to share/shares
77. Helps student
78. Shows affection by touching
79. Smiles, laughs cooperatively with student
80. Praises pupil
81. Requests help, cooperation
82. Talks cooperatively with target student
83. Talks uncooperatively with target student
84. Justifies own action to student
85. Ignores student
86. Asks permission from student
87. Seeks reassurance, support from student
88. Warns, threatens
89. Criticizes, blames
90. Teases with malice
91. Glares, makes faces at student, makes negative gestures

92. Damages student's property
93. Hits, hurts student
94. Yells, screams at student
95. Pouts, withdraws from student
96. Cries, whines after interacting with student
97. Tattles on student
98. Distracts target student
99. Encourages negative behavior

Criterion Script 1

Select Pupil: Jane

Teachers: Fred, Pam

Pupils: Pat, Sam, Bill, Jim, Mary

Aide: George

11:10 a.m.

When you find Jane, your pupil to observe, she is in her classroom talking to the teacher.

Pam: "Jane, why don't you work on your art project since you've finished your reading?"

Jane walks across the area to her desk, gets her crayons, and then goes to the back table. She sits and begins to color on a large poster which was there. Sam is also at the table.

Sam: "What are you doing?"

Jane: "Making a fire safety poster for art."

Sam: "It looks silly. What's that?"

Jane: "Leave me alone, you jerk. You don't know anything."

Sam: "I can draw better than that."

Jane: (runs and clings to Pam): "Sam won't leave me alone. He keeps picking on me." (whining)

Pam: (putting her arm around Jane): "Tell me what happened."

Jane: (still whining and clinging but calmer): "Sam said my drawing was crummy."

Pam: (walking back to the table with arm around Jane who is still clinging): "Do you think it's crummy?"

Jane: (both let go of each other and stop): "No."

Pam: "Then what he thinks shouldn't matter. Go on with your work now. I think it's a fine poster. Sam, you shouldn't pick on Jane."

Jane: (sits and works on her poster)

Sam: "Tattletale."

Jane: (sticks tongue out at Sam and then continues to work)

Pat: (coming to the table): "Jane, can I help with your poster?"

Jane: "You can't help color because it's supposed to be your own but you can hand me the crayons. Yellow, please." (Pat hands it to her.) "Thanks." (Continues to color.)

Pat: (watches for a minute): "This isn't any fun. See ya later." (Pat splits. Jane watches her go and sit by Mary and Fred, the teacher, who are reading. Jane then stares at her poster.)

Jane: (to self): "It's not a bad poster. Maybe I should color that part red. It would be more colorful."

11:20 a.m.

Jane is still muttering to herself and then begins coloring again.

11:22 a.m.

Fred: "Time to clean up for lunch."

Jane begins to put away her crayons when Sam calls her a name. She hits Sam on the arm. Fred notices this and shakes his head at Jane. Jane gathers up her crayons, goes to her desk, and puts the crayons away.

11:25 a.m.

Jane seeks out Pat and Mary. They start off to lunch together.

Criterion Script 2

Select Pupil: Sam

Teachers: Fred, Pam

Pupils: Jane, Pat, Bill, Jim, Mary

Aide: George

1:00 p.m.

Sam, Bill, Jim and Mary are in reading group with Fred in the classroom. Mary is reading. Sam is following along in his book but is making distracting clicking noises with his mouth. Fred reaches over and touches Sam on the arm. Sam doesn't look up but does stop clicking.

Fred: "Sam, would you read now?"

Sam: "No"

Fred: "Well, maybe later. Bill, how about you?"

Bill reads and Sam begins to draw on the table. Fred ignores this for a while. Sam stops drawing on the desk and begins to draw on his clothes.

Fred: (touching Sam): "You shouldn't draw on yourself and your clothes, Sam." (Takes arm away.)

Sam: (Nastily): "Why not?"

Fred: "Your mother will have a hard time getting those stains out."

Sam: "You're always picking on me."

Fred: "Why don't you go sit down Sam and come back when you're in control of yourself?"

Sam goes to his desk and sits. Fred returns to the reading group. Sam puts his head on the desk and closes his eyes.

1:15 p.m.

Fred finishes with the reading group and walks over to Sam. He just pulls up a chair and sits next to Sam, looking at him. Soon he reaches out and touches Sam on the shoulder. Sam looks up with a start and pushes Fred's hand away.

Fred: "If you need someone to talk to, call me or come back when you can handle it."

Sam watches Fred leave and go to his desk where he begins some paper work.

1:20 p.m.

Sam watches a group doing a project. He finds a mirror and makes faces at himself in it. Soon he catches Fred's attention and signals for him to come over. Fred smiles, nods, and walks to Sam.

1:22 p.m.

Fred: (putting his arm around Sam's shoulders): "I'm glad you're feeling better and are able to communicate that. It shows that you are becoming able to cope."

Sam: "Is it OK if I finish my math?"

Fred: "Sure. Need any help?"

Sam: "Nope." He goes to his desk on the other side of the area, gets his math, and works on it.

1:25 p.m.

Sam does a few problems but soon throws up his hands in disgust. He appears to get an idea and looks around the room. He sees Bill and says "Psst, psst." Bill notices and comes over.

Bill: "What do you want?"

Sam: "Help me with this math."

Bill: "I gotta finish my reading first. Ask Pam."

Sam: "Some friend!" He sits for a while playing with his shoe string. (looking at his pencil) "Boy, am I dumb. Can't even do these problems." He catches Pam's eye and motions her over.

Pam: "What's up?"

Sam: "Can you help me?"

Pam: "What's the problem?"

Sam: "I don't know how to do this."

Pam: "You've done these first ones very well. Try another while I watch."

Sam: "Won't do no good."

Pam: "Try anyway."

Sam" (does problem): "Hey that's right, huh?" (while clapping hands)

Pam: (pats Sam on the shoulder and nods yes)

Sam does a few more problems, then smiles and touches Pam.

Pam: (smiling): "Very good."

Practice Coding Script
for General Category System
30 Minutes

Teacher: Ms. Smith

Aide: Ms. Brown

Select Pupil: Bob

Peers: David, Carole, Jim, Wes, Stanley, Joyce, Pat, and Julie

10:10 a.m.

When you find Bob he is sitting 10-1 at his desk in the classroom working on 01-3-3 a math worksheet 09-2-1. The teacher is at a table working with a small group on another exercise 04-5. The aide is playing a card game with Carole No Code.

Stanley goes "Psst" trying to get Bob's attention 07-2. Bob looks up and smiles 01-4-2 but goes back to his worksheet 01-3-3.

10:15 a.m.

Bob gets up, goes across the room, and takes his paper to the aide to to be checked 10-3.

Bob: "Ms. Brown, will you check my paper?" 01-2-1, 10-2.

Ms. Brown: "Just as soon as I finish this game with Carole." 04-2.

Bob: (Moves two steps to the next table where David is reading 10-3. He puts his arm around David): "Whatcha doin'?" 01-1-2.

David: "Readin'." 06-2

Bob: "Whatcha readin'?" 01-1-2

David: "Book" 06-2

10:18 a.m.

Ms. Brown: "Bob, I'm ready now." 04-2

Bob: (Moves back to Ms. Brown 10-3, leans against her shoulder 01-3-1, and sticks his tongue out at Carole 02-4-2 who makes a face at him): (07-4) "See you later, David." 01-2-2.

10:19 a.m.

Bob moves to an adjacent chair 10-1. Ms. Brown and Bob talk about his math worksheet 04-2, 01-2-1.

10:22 a.m.

Ms. Brown (touches Bob's arm): "Good job, Bob." 03-1. (Bob is listening 01-5-1.)

Ms. Smith: "It's time for art, now 09-9-1. Everyone go back to your desk and get ready 04-2."

Bob goes back to his desk 10-3. On the way he manages to kick Wes' foot 02-3-2. Wes grabs at him saying, "You punk" 07-1, but misses and Bob sits down 10-1.

10:25 a.m.

Ms. Smith: "Today I thought you might like to continue making the paper mache dragon." (Bob is staring out of the window 02-5-4.) "We formed the chicken wire yesterday, and we'll cover it today. When it's covered, we'll paint it. Bob, will you get some newspapers from the cabinet?" 04-2.

Bob (startled): "What?" 01-2-1.

Ms. Smith: "Where were you, Bob?" 04-2.

Bob: "I was thinkin' about that creep, Wes. I'm gonna beat the shit outa him." 02-2-1.

Wes: "You and who else?" 07-2.

Bob: "Just me." 02-2-2.

Ms. Smith: (raising her voice) "Cut that out!" 05-2. Bob gives Wes the finger 02-4-2 which is returned 07-4. They quiet down 01-5-4.

Ms. Smith: "Joyce, maybe you'd better get the paper." 04-5 (Joyce brings the paper) "Thanks." (Ms. Smith explains how to make paper mache. Bob is paying attention 01-5-1.)

10:30 a.m.

Students all begin to work on paper mache 09-5-1.

Bob: (to David)"This stuff is gooey." 01-2-2.

David: "Let's smear it on Wes." (They begin to put the paste on Wes 02-3-2).

Wes: "Teacher!"

Ms. Smith: (grabbing Bob and David): "If you can't behave you'll go out." 05-1.

Bob: (punching Ms. Smith): "Get your hands offa me!" 02-1-1.

Ms. Smith: (letting go of David): "Not until you calm down." No Code. (Moving Bob, who is struggling to a chair 02-3-1). "Sit here until you're under control." (Lets go of Bob.)

Bob: "You stink!" 02-2-1.

Ms. Smith: "When you can work cooperatively you may go back to the dragon." 04-2.(Ms. Smith returns to the other students.)

10:37 a.m.

Bob sits and watches Ms. Smith and the others working on the dragon and fiddles with his shirt buttons. 01-3-4.

10:40 a.m.

Bob gets up and wanders 10-3 around the room looking at nothing in particular 01-3-4. Ms. Smith catches his eye and smiles 03-4.

Bob ignores her 01-5-1, 04-5. He finds some modeling clay and begins modeling with it 01-3-3.

Appendix F

Examples of Suggested Interventions

PROJECT INSTEP

Teacher: Susan
Student: Carl
Date: April 22, 1976

Target Behavior: Talking out at inappropriate times

Basis for Intervention: To extinguish talking at inappropriate times it is important for Carl to realize when his talking is out of place and how often it occurs. This realization may influence Carl to become responsible for his talking and realize that inappropriate behavior has consequences for him. The consequences are not punishments, but the absence of predetermined reinforcers. Also, since much of his talking is to gain attention and vent his feelings, it is important that these two issues be dealt with in a positive manner. By providing nonthreatening and personal means for Carl to express his feelings, attention seeking by talking may reduce because an alternative is provided for him.

Suggested Intervention Procedure:

A. Discuss with Carl the problems that may arise when he "talks out" and interrupts the work and conversations of others. Suggestions for discussion:
   1. How does he feel when others interrupt him?
   2. Why is noise often distracting? What happens when you are distracted?
   3. How does excessive negative talk to and about others affect how they feel about him?
   4. How does he feel when he is not listened to by others?
   5. How does he get people to listen to him? Is it a give-and-take situation?
   6. When is free talking permissible in the classroom?

B. After the above discussion re-explain the rules for talking in the classroom and ask him to help uphold the rules by being responsible for his own talking. To help him do this ask him to count the number of times he talks out of turn and when talking is inappropriate. The following chart can be used as a guide for the reinforcement and contingency schedule.

Time Schedule	Week 1		Week 2		Week 3	
	C	R	C	R	C	R
9:00-10:00	≤ 5	$	≤ 4	$	≤ 2	
10:00-11:00	≤ 5	$	≤ 4	$	≤ 2	$
11:00-12:00	≤ 5	$	≤ 4	$	≤ 2.	
12:00-1:00	≤ 5	$	≤ 4	$	≤ 2.	$
1:00-2:00	≤ 5	$	≤ 4	$	≤ 2.	
2:00-2:30	If 4 $ before lunch, 15 min. free time.		same		same except for # of $	

C = Contingency   R = Reinforcer

Remember that when using reinforcers it is important to also give verbal praise with the tangible reward so that as the frequency of tangible rewards decreases, the behavior can be maintained by use of praise and self-control.

For the first week you should also tally Carl's talking out and compare this with his tallies. Do this one or two times each day. Tell Carl you are going to do this for one week, but he will not know which hours you are checking. Explain that this is a check to see if the system works for him and that if your tally differs from his by more than two, then there will be no reinforcer for that hour.

C. Obtain a tape recorder, headphone, and tapes for Carl to use to record into when he has something to say about how he feels or about something that has happened. Have this be accessible for him to use whenever he feels he needs it. This is suggested as an alternative for him to use instead of interrupting or when you are involved with other children. Try to set aside some time each day to listen to the tape together and talk about what he has to say. This may set the grounds for dealing with some of his problems and concerns.

PROJECT INSTEP

Teacher: Kathy
Student: Dellis
Date: April 22, 1976

Target Behavior: Building self-confidence

Basis for Intervention: Dellis' attitude and low level of self-confidence appear to influence his defensive and attention-seeking behaviors. To compete with these behaviors activities can be structured to promote pride and reinforce a healthy self-image. These activities may facilitate a change in behavior because they are designed specifically for Dellis and his need for success.

Suggested Intervention Procedures:

A. The following activities focus on the assets of Dellis and are suggested to be used in addition to rewarding regular task successes and attempts.

1. Encourage self-directed speech.
2. Encourage him to record on tape or in writing stories about himself, his feelings, and his concerns. This could be the beginning of a book about him he could give his parents.
3. Provide him with a specific responsibility in the room that remains his for several weeks.
4. See if you can have him tutor a younger child in another class. Help make him feel responsible for devising lessons and activities for that child and discuss ways this can be done.
5. Find an area that Dellis has special interest in and encourage him to develop an "expertise" in it so that other students will know that they can go to him to find out about that area. Perhaps you could have him develop materials (posters, charts, etc.) for a unit that you intend to present to the class in the future.
6. Encourage Dellis to draw several pictures that could be displayed together ... an Art Show. Or have him organize and be the leader of a group of students that would like to put together an art display.
7. Have Dellis assist you in determining his assignments and activities. This type of short conference at the end of school or at the beginning of each week could influence his on-task behavior and his attitude towards his ability to have input in making decisions.

PROJECT INSTEP

Teacher: Janie

Student: Tony

Date: April 22, 1976

Target Behavior: Talking out at inappropriate times

Basis for Intervention: Tony's difficulty in controlling his talking out and the tone of his voice may be influenced by several factors. He may be unaware of how often and when he talks. Because of his well-meaning attitude he also may not realize the consequences of his behavior for others, as well as for himself. The awareness provided by Tony monitoring his talking and observing the consequences of his talking may modify the intensity of the problem.

Suggested Intervention Procedures:

A. Find out if Tony is aware of how loudly he talks. One way this could be accomplished is to have all the students in the room talk into a recorder and have Tony distinguish his own voice. Ask him how he could tell his voice over all the others. This could be followed with a discussion of the appropriateness of voice control and why a loud voice is not always appropriate.

B. Another awareness activity may also help Tony realize the impact of sound. Find out what Tony knows about the ear, sound vibrations, sound measures, and the effects of the various degrees of intensity. From his existing knowledge of sound and his questions about sound you and he could develop a unit of study that he could do independently. This would be a fine opportunity for reinforcing independent work while learning about the impact of noise and sound on himself and others.

C. A more concrete measure of Tony's awareness of his own talking out could be achieved by having him keep a tally of how many times he talks out of turn or when talking is not appropriate (independent work time). You could have him do this during each instructional period for a day to obtain a baseline measure and then discuss with him the frequency and when it occured. This would provide him with a concept of what he is actually doing. After this is established write a contract with Tony that provides for free time if the number of tallies decreases by a certain number. You could stipulate that a decrease of five means three minutes of free time or any other combination that would reinforce not talking out during specific periods of time.

D. Encourage Tony to observe and talk about how others react when his talking interrupts what is occuring in the class. This type of sensitivity may encourage Tony to think alittle more before he begins to talk to someone who is working.

E. Has Tony had his hearing checked recently? Perhaps the loudness and sometimes unresponsiveness to directions could be the result of his inability to hear clearly.

PROJECT INSTEP

Teacher: Debbie

Student: Dewayne

Date: April 22, 1976

Target Behavior: Elliciting talk and eye contact

Basis for Intervention: To maximize Dewayne's academic and personal potential and abilities to communicate it may be necessary to structure activities that require verbal output. Activities of this type generally reduce the anxiety that may be accompany interpersonal communication. In addition, the type of work and output associated with the activities provide more opportunities to reinforce talking and making of eye contact.

Suggested Intervention Procedures:

A. Arrange the room so that when verbal activities are to occur everyone is sitting facing each other and eye contact can be easily made.

B. Find out what special interests Dewayne has and have him talk about them into the tape recorder. Provide a special reinforcement for increasing length of stories.

C. Reinforce immediately the eyecontact and confrontive conversation shown by Dewayne. Do this consistently without reinforcing the nonappearance of the behaviors (i.e. converse only when in face to face situation).

D. Develop a special project for Dewayne that requires him to be a leader and organizer of the activity. This activity could be a play, a mock radio interview, a comedy hour or whatever, as long as the output is oral.

E. Designate a particular time each day that you and Dewayne can share what has occured, what problems he has, or what his special concerns are.

PROJECT INSTEP

Teacher: Buria

Student: Frank

Date: April 22, 1976

Target Behavior: Talking out at inappropriate times

Basis for Intervention: Frank's difficulty in controling his talking out and agitation of others to gain attention and peer esteem needs to be dealt with on two levels. On an awareness level Frank should be able to be more cognizant of when it is appropriate or not for him to talk and interact. The self-control necessary for this to be accomplished is not totally developed; however, this under-development of self-control appears to be accompanied by a low feeling of importance. So to deal with the talking out it may be advantageous to concentrate on both areas together.

Suggested Intervention Procedure:

A. Encourage Frank to count the times during each period that he engages in inappropriate talking. He may not be aware of the frequency of his talking even though he is aware of why he does it. Without your monitoring of his correctness offer to allow him time to work on the art projects if the number of talking out decreases each day. Provide verbal reinforcement during the times of the day when he is not talking in the form of a reminder that his freetime is increasing or that you are anxious to see his art completed.
A discussion of why talking out has advantages&disadvantages may stimulate Frank to think about his behavior if he realizes that it may effect his peers in ways that he doesn't know.

B. Concentrate on reinforcing Frank for behaviors related to talking and agitating only. This way the reinforcers will not be associated with other behaviors while he is learning new behaviors.

C. See if you can arrange for Frank's art work to be displayed at a local library or somewhere in the school. You may also want fo find a teacher in the lower grades who needs some help preparing charts or posters fora unit she is working with. Frank could contract to work for that teacher and fulfill his contract during his earned art time.

D. To increase Frank's feeling of importance you might ask him to help you plan his work. Incorporate his ideas into the assignments and let him know that his input is valuable to the planning.

E. Try to find one job in the classroom that is of relative importance to the functioning of the class and make Frank responsible for handling that job. It may be related to materials , erronds, collecting money, or changing the bulletin board every other week. He should know that it is his role to complete the job and that it is important.

PROJECT INSTEP

Teacher: Debbie
Student: Lonnie
Date: April 26, 1976

Target Behavior: Getting out of seat

Basis for Intervention: Lonnie seems to have no place and few possessions of his own; in consequence he tries to get everything he can at school, both in terms of attention and material. A separation from other children may result in two outcomes: (1) it would make violent interactions with peers less frequent, and (2) it would give him a definite space that belonged to him.

Lonnie has not shown that he has a strong self-concept if, indeed, he has any at all. The area of a personal space is suggested mainly that he has a place with which to begin to identify. Since privacy is probably not part of his life outside of school, the experience, limited as it is, may be enjoyable to him. Paired with specific reinforcement for in-seat behavior, a place of his own may decrease his wandering.

Suggested Intervention Procedures:

A. Use a divider, a refrigerator carton or any kind of separation to physically define a space for Lonnie. Emphasize that it is his place, his office or whatever and his work is to be done in that space. Encourage him to tape papers or drawings on the cardboard so that he can see his work daily.

B. Take two or three 10-minute periods a day, tape a piece of paper on Lonnie's desk and ask him to mark every time he gets out of his seat. You should also keep a record. It is possible that Lonnie actually doesn't realize how much he is moving around and this is a way of focusing his attention. Matching your record with his will help to ensure his accuracy. From our records, he averages 3 times out of his seat per 10-minute interval.

C. Reinforce Lonnie, verbally and with tasks or objects for staying in his seat during these 10-minute periods. Reinforcement could consist of, for example, time to work on a potholder or draw a picture, the acquisition of another plant, or food such as candy or crackers. Reinforcers should be varied in order to remain effective, and should be given immediately following the ten-minute period, contingent upon less than a decided number of times out of seat. If you find that he is usually out of his seat 3 or 4 times a period, reinforcement should be contingent upon two or less.

PROJECT INSTEP

Teacher: Harry.
Student: Ricky
Date: April 26, 1976

Target Behavior: Increasing time on task when he is not working with an adult.

Basis for Intervention: Ricky seems to have trouble working at academic tasks when he is left on his own. He also has trouble working for extended periods of time. He needs to earn praise and reinforcement for staying on task. He should have successful experiences with his completion of work leading to his getting to do or have something that he wants.

Suggested Intervention Procedures:

A. Select a time period when Ricky is doing individual work such as math that he is able to do without much close attention.

B. Reduce the length of the assigned task by 15 minutes so that he can have time after completion of the task which is consistently avaialble for free time.

C. Discuss with Ricky that you are concerned about his not being able to work on his own. That you want to help him learn how to work on his own.

Describe how you want to change the math period so that he can earn time to do things (drawing, working a puzzle, etc.) he would like. Tell him you're going to reduce the number of math problems he has to work. That about every five minutes you will look to see if he is working. If he is working you will give him a check mark for that 5 minutes. If he gets four check marks during the first half hour he can choose an activity to do the last 15 minutes. If he does not get four check marks he will continue working as usual.

D. Starting on Tuesday, April 27, give him the reduced number of problems to work with and the check mark sheet. Remind Ricky that if he is working when you look, about every five minutes, he will get a check mark and your praise. If he gets four check marks he can choose an activity for the last 15 minutes of the period.

E. Leave Ricky to work on the math by himself. Every 4 to 6 minutes look up at Ricky. If he has his eyes directed on his paper and looks like he is working, go over to him, praise him for working and place a check on his sheet. If he is not on task (i.e., playing with something, looking to someone, ignore him and continue working with other students. Only acknowledge him when he is on task at the four to six-minute intervals.

F. If after the 30 minutes Ricky has been on task at least 4 of the six sessions, praise him for working and tell him he can select something he would like to do (i.e., drawing, playing with a puzzle, etc.) for the last 15 minutes of the period. If after the 30 minutes Ricky has been on task less than four of the six check times--tell him he should continue working and tomorrow maybe he can earn free time by working more of the time.

PROJECT INSTEP

Teacher: Gary
Student: Michael
Date: April 26, 1976

Target Behavior: Decrease uncooperative verbal interaction with peers.

Basis for Intervention: Michael is verbally aggressive with peers which appears to happen more often when the teacher is not present to structure the activity. Michael may be seeking recognition and status for his peers by his verbal aggression. He does not interact with his peers in ways to receive their recognition and friendship, and so seeks to gain it by inappropriate ways. If Michael has a way of gaining one or more of his peer's approval by controlling his uncooperative interactions it may help him to break his method of attention seeking.

Suggested Intervention Procedure:

A. Discuss with Michael his problem in being verbally aggressive with the other students and ways he can change this.

Discussion Topics:

1. How does he feel when others threaten him or yell at him.
2. How does he feel about not being able to get along with the students in class.
3. How would he like to set up a black culture area of the classroom where he can have free time if he gets along with the other students.
4. He could even invite other students to have free time and read with him in the black culture area if he didn't threathen them, etc.

B. After the discussion, tell him that in order for him to work in setting up the area and have free time there, he needs to start working on being cooperative with the other students and not disrupting the class. To help him do this, have him count the number of times he talks to other students from 11:00 to 11:45 each morning. Set a maximum number of times (3 or 4) that he can talk without losing the right to have free time in the black culture area.

Tell Michael that during his free time, if he wants to, he can invite other students to spend time in the black culture area also. However, he will lose the priviledge to stay in the area during that free period if they get into an argument.

C. Have Michael check out materials from the school library so that he can use them in setting up the area. He could also transcribe songs from black artists' records and have these as part of the area. You could have him start a scrap book about his favorite black artists and entertainers. Under his direction you could select other students in the class to participate in the activities. It should be set up so that he receives status and recognition for the area and so that his cooperative interaction with his peers gains access to the area for him and other students.

PROJECT INSTEP

Teacher: Gary
Student: Jake
Date: May 3, 1976

Target Behavior: Increasing appropriate verbalizations with peer in unstructured activities.

Basis for Intervention: Jake gets excited when he is in situations where their are no clearly defined rules for interacting with his peers. His excitation is associated with his making immature comments to his peers. He especially has immature ways of expressing anger or displeasure toward peers. For him to change this behavior it is necessary first for him to recognize when he is excited. Second, it is important for him to be able to differentiate appropriate versus inappropriate words he uses to express anger toward peers. Third, it is important for him to practice replacing the inappropriate words with appropriate ones.

Suggested Intervention Procedures:

A. Talk with Jake about how he feels when he's working on something he likes versus how he feels when he's in a free period with the other students.

Talk with him about things that are different in his body (such as tightness in his chest, breathing faster) when he's excited versus when he's calm. Ask him to make a record of how he feels in the two situations described above on a scale such as:

Excited		Calm
Nervous		At ease
Heart		Heart beat
Breathing fast		Normal pace

Tell him you will check with him periodically to see how he's feeling.

B. Tell Jake that you've noticed that in situations when he's excited and with the other students he sometimes says immature things to the other students or calls them immature names.

Discuss with him that you would like him to understand what he does when he is excited and upset with the students. Ask him to keep a log of what he says to the other students in free time especially names he calls them.

C. Set up a time to go over the record of excitation and log of names. Go through the list of names and help Jake differentiate those words that are immature from those that are OK.

Suggest other ways he could express his anger, etc. rather than the immature words he used.

D. Ask Jake to practice using the new words and to keep track of them in his log.

E. In order for Jake to get some positive recognition from others during this time and to reinforce him for keeping the log, etc. it may be wise to let him use some of his time to work on a project in a area of his choice and give a demonstration or set up a display in the classroom for the other students.

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